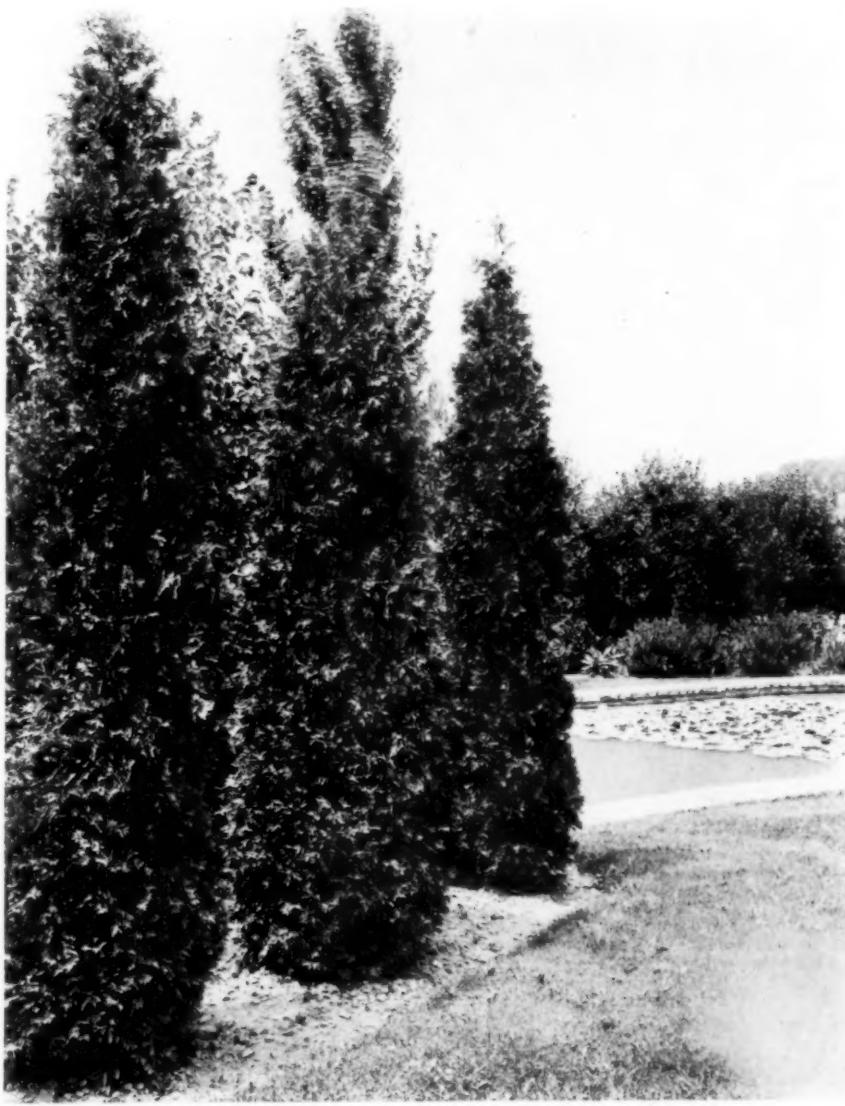


AMERICAN NURSERYMAN

The Nurseryman's Forte: To Make America More Beautiful and Fruitful

JUNE 1, 1941



Thuja Occidentalis Fastigiata

Seek Data on Stock for Camouflage
Program for Convention Cruise
Details in Landscape Planting
Selection of Broad-leaved Evergreens

AMERICAN NURSERYMAN

F. R. KILNER, Editor

Editorial

STILL THERE IS TIME.

The other day a convention manager said it was his experience that conventions held on shipboard were successful if they attracted from one-third to one-half the maximum attendance of a convention held in a hotel in some big city. The registration on land includes many local persons who only need spend carfare and lunch money to take in the sessions. Many more come only for a day or two by automobile from neighboring territory. So if a cruise drew a registration of more than half a land convention, he said, it was because the attractions made it a humdinger.

Well, the registration at the New York convention last year was just over 800. The reservations for the convention cruise of the A. A. N., July 7 to 11, already are past the 400 mark. So it can be counted a success already.

This spring has kept many landscape nurserymen busy up to the end of May, and it is reasonable to assume that a good number of them will have time now to make their cruise reservations. And there are a lot of last-minute convention goers in any year.

There is still time to enjoy the good things of the coming convention cruise, outlined only briefly in this issue. So don't delay. It is a unique opportunity.

SPRING SALES PROBLEM.

The astute amateur gardener placed his order for nursery stock back in March or April, if not before, and he received his stock from the nursery in dormant condition so that he was able to do his planting early enough to get the best results during the coming summer. His planting was done, in most cases, before the wayside stands, gas stations and roadside vegetable markets began to display stocks of trees and shrubs.

While the passing weeks showed delivery nearing completion in the nurseries of a locality, trees, shrubs and evergreens appeared in increasing

The Mirror of the Trade

numbers at the cash-and-carry shops along the highways. In fact, their displays were at their height about the time the conscientious nurseryman was ending deliveries because his plants were in full leaf and some of them in bloom.

Of course, the amateur who did not think about planting until the temperature was up and the sun was bright pays for his procrastination and lack of foresight. He hastily buys stock from a near-by gas station because it is easy to do so and he is in a hurry. Maybe he realizes that some of this stock is past its prime, but the likelihood is he does not.

He got what he deserved, but the lack of success with the plants is the sales problem of nurserymen, not of the gas station operators or the wayside vegetable peddlers. They go on selling gasoline and vegetables, for the nursery stock was just a side issue for a few weeks, anyway.

Reflecting on these things, one wonders if nurserymen would find it profitable to have early stock in stands of their own on the highway. If not, and if they continue to sell to gas stations and vegetable stands, why not tell the latter to get their stock in earlier, so that the public will have a chance to plant it early enough to give the trees and shrubs a fair chance of survival?

TREES AS CAMOUFLAGE.

The dive bomber used with success by Germany has made necessary the camouflage of rear-line objectives as well as front-line points of defense and attack, according to Homer Saint-Gaudens, one of the nation's best camouflage experts.

Lieut.-Col. Saint-Gaudens, long-time director of fine arts at the Carnegie Institute, Pittsburgh, and now on leave of absence due to his recall to the army, served as a captain in the army's first camouflage unit in the World war.

"The dive bomber," he explained to a United Press correspondent, "has created the necessity for a somewhat different technique of camouflage in many cases. Today, not only front-line offensive and defensive constructions are to be camouflaged, but also

important installations in the rear such as ordinance factories and munitions plants."

An effective camouflage for industrial plants, he believes, would be what he termed the helter-skelter planting of trees about the plant to confuse bomber pilots.

By planting the trees in disorderly fashion, he said, telltale shadow patterns which might show up in aerial photographs would be eliminated.

Camouflage against artillery fire was successful, he added, only when it completely concealed the object from the camera, while camouflage against dive bombing could be accomplished simply by blurring the scene and confusing the pilot.

"The camouflage of large industrial plants is based on the hope that it can confuse the mission of the attacking plane until it is brought down by gunfire or that it can drive an enemy into area bombing rather than into specific bombing," he said.

To make the strategy clear to the layman, he explained that bombers usually must recognize a target from a distance of five or six miles and that at that height even a large factory appears no bigger than a postage stamp.

Thus, he said, when the target can be blurred sufficiently to force the bomber to take more than one run before passing directly over his target, his danger is increased, his efficiency is greatly diminished and camouflage has served its purpose.

THE issue of Arnoldia for May 23 is interesting for a list of some of the woody plants injured during the past winter at the Arnold Arboretum and also a short list of the woody plants killed to the ground. The data present a confusing picture as to causes, reports Dr. Donald Wyman.

JUNE 7 and 8 are the dates set for the oleander festival at Galveston, Tex., intended to mark the one-hundredth anniversary of the introduction of the plant there, since a sea captain is said to have brought a few sprigs or plants from Jamaica in 1841. It is stated that the city now has more than a million of the bushes.

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Prepare your advertisement now for the

PRE-CONVENTION NUMBER

- COVERS IN FULL COLOR -

Issued July 1 — forms close June 25

EARLY-BIRD NUMBER

Issued June 15 — forms close June 10

Announcements of exhibits, or representatives to be in attendance at the convention, will help you book more and better orders for the season ahead.

Seek Data on Nursery Stock for Camouflage in National Defense

On the very day that the President of the United States issued his proclamation of an unlimited national emergency, army engineers were conferring with nurserymen at Washington, D. C., May 27, about obtaining all types of nursery stock as soon as possible for camouflage. Immense quantities of trees, shrubs, evergreens, ground covers and vines were the subject of inquiry by the camouflage division of the army engineer corps.

Such plants will be required, first of all, to conceal from airplane view manufacturing units engaged in turning out armament material. In the European war it has been found difficult to locate and bomb factories shielded from above by trees and shrubs. Such plants break up the straight lines of roads and tracks leading to the factories, vines cover the walls and even tubbed plants may hide the roofs.

Second in importance is hiding coast defenses with similar material and, in addition, with ground covers about gun emplacements. Third, airports are to be disguised, so that they may not be the easy targets they now are. Fourth, cantonments need early planting, so that barracks and other quarters may be hidden from overhead view by trees. Plantings may also be used to break up the straight lines of coastal highways and what may become military roads.

Observations in the current war in Europe have shown the vital importance of camouflage as a protection against the crippling blows of bombers. The camouflage division of the United States army engineer corps has been studying the most effective means of camouflage. Of high importance are the plants nurserymen grow.

Realizing this importance the War department sought contact with the nurserymen of the country and found the executive headquarters of the American Association of Nurserymen, at Washington, D. C., the logical place to begin inquiries. Last week conferences were held by the army

engineers with Executive Secretary Richard P. White and a committee composed of Clarence O. Siebenthaler, Dayton, O.; William Flemer, Jr., Princeton, N. J., and Chet J. Marshall, Arlington, Neb. These nurserymen were told the needs and requirements of the army. It was clear that vast quantities of material were wanted as soon as they could be ob-

**War department engineers
are contemplating the use of
immense quantities of nur-
sery stock of various kinds for
camouflage. To advance their
plans, they need to know what
quantities will be available
soon. You will receive by mail
a request about stock you can
supply. Reply promptly to
this national defense call.**

tained. The next step was to find out what is available and how soon it can be delivered to the War department.

The program is of national importance, and the inquiry for stock is on a national basis, although the army officers give priority to the coast defenses of New England and the rest of the Atlantic coast, while their concern for the Gulf coast and the Pacific coast follows closely.

The committee mentioned above translated the army needs into lists of suitable material which nurserymen might have. As promptly as such lists can be printed, doubtless within a few days, a questionnaire will go to nurserymen of the country from the office of the American Association of Nurserymen to ascertain what

quantities of various trees, shrubs, evergreens, ground covers and vines will be ready for delivery in autumn. While tubbed plants may not be numerous, the trees and shrubs grown in tin cans in California may take their place.

This questionnaire should reach nurserymen through the mails within a few days. It is being mailed to the available list in the office of the American Association of Nurserymen, for again this national organization has been ready for action in an important national matter.

Watch for this questionnaire to reach you in the next few days. Fill it out and return promptly, showing the items and quantities you can supply next autumn. If you have other items, or any suggestions to offer relating to camouflage material, that information will be welcome at A. A. N. headquarters along with your reply to the questionnaire.

Should you have stock in quantity to offer and not receive one of these questionnaires within the next week, make inquiry of Dr. Richard P. White, executive secretary, American Association of Nurserymen, 636 Southern building, Washington, D. C.

The nurserymen of the country are to participate in our national defense. Let your response be prompt!

THE Forest Nursery Co., McMinnville, Tenn., claims the distinction of having sent a truck on the longest haul for the year, as one of the company's trucks made the trip from McMinnville to Wells, Nev., 2,127 miles each way.

E. FRED ROWE, of the McFarland Publicity Service, Harrisburg, Pa., had a serious relapse, from asthma, about three weeks ago, after making recovery from his heart attack. While recovery was at one time only a matter of hope, a new medicine has brought him back rapidly. Now there are prospects of his returning to the office in two or three weeks.

Program for Convention Cruise

Announcement of the business program of the sixty-sixth annual convention of the American Association of Nurserymen, published on the opposite page, reveals that this gathering will have ample opportunity to learn of the diversified activities of the organization, with no outside speakers to while away the time, leaving ample leisure between sessions for full enjoyment of the entertainment on board the ship and of the scenery on the shores of Lake Michigan to be viewed from the decks of the S. S. Seeandbee.

With reservations for over 400 persons on hand in the closing week of May, success of the trip is assured—an opportunity to get well acquainted with the leading lights in the industry and to enjoy a unique vacation among friends and associates. Experience at previous conventions makes certain a large number of last-minute reservations, at least another hundred persons. The invitation of President Avery H. Steinmetz on this page makes welcome to join the cruise any nurseryman large or small, of whatever category, regardless of whether he belongs to the A. A. N. or not. In fact, President Steinmetz regards this as an unusual opportunity for non-members to get a close-up view of association members and the activities of the organization, of which an outline appears on page 8.

Since the date of sailing from Chicago is July 7, no time should be lost in sending your reservation, with payment for space, to the transportation chairman, W. J. Smart, Dundee, Ill. With the reservation, be sure to send the individual names of the persons in your party, whether members of the firm, employees, associates or friends not connected with the trade. All will be listed in a souvenir booklet, showing cabin space, so that it will be used on the boat as a telephone directory, each cabin having its phone, and later will be much prized as a souvenir as was the booklet containing the passenger list of those on the convention special to the Portland convention. Again this is offered with the compliments of the American Nurseryman.

INVITATION TO JOIN THE A. A. N. CONVENTION CRUISE.

The S.S. Seeandbee has cabin space for 800 persons. This enables us to accommodate, in addition to members of the A. A. N., nurserymen who are not members of the association, and also friends of nurserymen. Wives and children are, of course, urged to come making the trip a family vacation.

Rates, which include everything in the way of expense for the entire trip, are as follows:

Inside staterooms, \$44 per person.

Outside staterooms, \$48 per person. (It is probable that two persons will be assigned to each stateroom.)

Children under 12, only \$12.00.

Reservations must be made immediately, and checks must accompany requests for reservations.

Write to William J. Smart, transportation chairman, Dundee, Ill.

A most cordial invitation is extended to all those who are interested in making the trip with us.

**AVERY H. STEINMETZ, Pres.,
American Association of Nurserymen.**

Staterooms should be reserved and paid for promptly, because the office of the steamship line will mail out, June 15, a passage ticket admitting you to the boat, as well as stickers to be put on baggage. Write on these stickers your name and address and cabin number, leave the bags at the dock and the crew will transport them to the cabins without your bother.

Since the steamer will sail sharp at 1:30 p. m., July 7, it is advisable to get on the boat early, any time after 11 a. m. Luncheon may be obtained on the boat at a moderate price, though that is not included in the passage fare.

In the next issue will be announcement of the sports and contests which will be provided for those on board who prefer exercise to relaxation in a deck chair. With that announcement will be told also the program of entertainment for the day spent at Mackinac island, an unusual event in itself. Note that plenty of time is shown on the business program as open for entertainment.

Persons who arrive in Chicago one

or more days in advance of the convention should reserve rooms early at the Hotel LaSalle, where the A. A. N. executive committee will meet, as well as several allied groups, as appears on the program scheduled.

At the Hotel LaSalle, Chicago, the A. A. N. has reserved room 104 for general headquarters, July 5 and 6. The executive committee will be in session in parlor B on those two days. Other rooms have been reserved for the meetings of allied groups, as noted on the program schedule.

Persons who drive into Chicago Monday forenoon may take their car to the dock, at the Navy pier, just north of the Chicago Loop, leaving automobiles there for garage attendants to store and deliver back to the dock when you return July 11.

After the excitement of sailing from this celebrated mile-long pier, time to get settled and opportunity to greet friends, the A. A. N. board of governors will hold its organization meeting, Monday afternoon, July 7, followed by the first business session of the convention. That will be over in ample time to enjoy dinner, engage in deck sports, see the floor show and dance in the grand ballroom.

Tuesday morning, July 8, while the boat is steaming up Lake Michigan, the second business session will be held, to hear the reports of the standing committees, whose members are active during the year but little heard until their account of stewardship is given.

Tuesday afternoon, several allied associations will hold short meetings. The most noteworthy, and not a short one, will be that of the National Landscape Nurserymen's Association. The executive committee of the landscape group will meet Sunday, July 6, at the Hotel LaSalle to take up any resolutions to be voted on at the business session and to plan the program in more detail. The half-day session on board ship will be devoted to the subject of sales methods, and it is proposed to have a dozen or so landscape nurserymen describe how they make a sale. Each man will be given about ten minutes

to talk and then about five minutes to answer questions. Office forms will be displayed, a photograph swap will again be held and opportunity will be given, then or some other time, to show slides and movies of landscape work. The success of the landscape group's meeting at New York last year augurs a full afternoon of profit this time.

Wednesday, July 9, the passengers will have the opportunity to cruise up the St. Mary's river and see the Soo locks, the busiest in the world, and especially so this summer when unprecedeted boatloads of ore are coming down from the head of Lake Superior to the steel mills at the foot of the lakes.

After a business session in the afternoon, there will be another opportunity for entertainment and dancing in the grand ballroom. The floor show is different each evening, and there is plenty of room for dancing, while those who prefer other entertainment will have many forms offered.

Arriving at Mackinac island Wednesday evening, the passengers will have the entire day Thursday to enjoy the historic and scenic sights of the island and engage in boating, fishing, swimming, golf and other sports. If you didn't read the article on Mackinac island, turn to the April 15 issue and note the attractions of that unique spot. More on the en-

tertainment there in the next issue.

Arthur Palmgren, chairman of the arrangements committee, not only promises games and contests on the boat, but during the day at Mackinac island he is arranging for a golf tournament, softball game, horseshoe contest, tennis and other sports. Carriages and bicycles will be available for those who want to tour the island.

It might be noted here that the clothing most suitable for the boat trip will be such as you wear for outing or sports—at least, what is most comfortable. There will be no occasion to dress up. A sweater or topcoat may come in handy for cool nights on deck.

Embarking on the Seeandbee that

COMPLETE A. A. N. CONVENTION PROGRAM

SATURDAY, JULY 5.

- 9:00 A. M. National Association of Plant Patent Owners, executive board meeting, Hotel LaSalle, room 102.
- 9:00 A. M. Ornamental Growers' Association, stock committee, Hotel LaSalle, room 101.
- 10:30 A. M. National Association of Plant Patent Owners, general meeting, Hotel LaSalle, room 102.

SUNDAY, JULY 6.

- 10:00 A. M. All-America Rose Selections, Inc., annual meeting, Hotel LaSalle, room 102.
- 10:00 A. M. National Landscape Nurserymen's Association, executive committee, Hotel LaSalle.

MONDAY, JULY 7.

- 11:00 A. M. Embarkation, Navy Pier, Chicago, S.S. Seeandbee, sailing 1:30 p. m.
Registration, purser's office, deck C (all day).
(Badge and badge book obtainable here.)
- 2:30 P. M. Board of governors, organization meeting, grand ballroom.
- 3:00 P. M. First business session, grand ballroom.
Call to order.
Announcements.
Appointments of temporary committees: Auditing, resolutions, credentials, etc.
Nominations for executive committee and other offices.
President's address, by Avery H. Steinmetz.
Report of executive committee, by Edwin J. Stark.
Report of treasurer, by Frank S. LaBar.
Presentation of the 1942 budget.
Report of executive secretary, by Richard P. White.
- 5:00 P. M. Cocktail hour, grand ballroom.
- 6:00 P. M. Dinner.
- 8:30 P. M. Entertainment and dancing, grand ballroom.

TUESDAY, JULY 8.

- 9:00 A. M. Second business session, grand ballroom.
Committee reports and discussion:
Arbitration, by Richard P. White.
Botanical gardens and arboreta, by Robert Pyle.
Legislation, by Miles W. Bryant.
Market development and publicity, by Paul Stark.
Nomenclature and plant name registration, by H. P. Kelsey.
Quarantine, by A. F. Meehan.
Horticultural standards, by William Flemer, Jr.
Trade barriers, by Lee McClain.
Trade practice and ethics, by C. G. Marshall.
Trade relations, by William J. Smart.
Transportation and traffic, by Charles Sizemore.
Councilor, U. S. Chamber of Commerce, by Owen G. Wood.

JULY 8, Continued.

- 10:00 A. M. Ladies' auxiliary, annual meeting, lounge, deck A.
- 12:00 M. Luncheon.
- 2:00 P. M. National Landscape Nurserymen's Association, grand ballroom.
- 2:30 P. M. Ornamental Growers' Association, library lounge, deck B.
- 2:30 P. M. Mail Order Nurserymen's Association, lounge, deck A.
- 3:30 P. M. Wholesale Fruit Growers' Association, library lounge, deck B.
- 4:30 P. M. Nurserymen's Protective Association, library lounge, deck B.
- 6:00 P. M. Dinner.
- 8:30 P. M. Entertainment and dancing, grand ballroom.

WEDNESDAY, JULY 9.

- 8:30 A. M. Cruising up St. Mary's river.
- 10:00 A. M. At Soo locks.
- 12:00 M. Luncheon.
- 2:00 P. M. Third business session, grand ballroom.
Special committee reports:
Clarification of article 7, section 1, by Seth L. Kelsey.
Cooperation with Registered Rootstock Association of America, by Joel Barnes.
Government procurement of nursery stock, by Chet G. Marshall.
Report of necrology committee.
Report of temporary committees: Auditing, resolutions, addresses.
Reports of affiliated groups.
Adoption of 1942 budget.
- 6:00 P. M. Dinner.
- 7:00 P. M. Arrive at Mackinac island.
- 8:30 P. M. Entertainment and dancing, grand ballroom.

THURSDAY, JULY 10.

At Mackinac island (meals on board the Seeandbee).

- 8:30 P. M. Entertainment and dancing, grand ballroom.

FRIDAY, JULY 11.

- 9:00 A. M. Final business session.
Unfinished business.
Award for slogan contest.
Award for sales-promotion contest.
New business.
Selection of 1942 convention city.
Election of officers.
Induction of officers.
Adjournment sine die.

night, the conventionists will sail southward, holding a brief business session Friday morning and returning to the Navy pier dock at noon, July 11, after a happy vacation voyage full of fun and benefit, yet all too short.

WHAT THE A. A. N. DOES.

How does the American Association of Nurserymen function, and what are the membership requirements?

This seems to be a frequent question asked by nurserymen who have not yet joined the organization, but have heard of the good work that has been accomplished during the past two or three years. In as few words as possible, the answer is:

HEADQUARTERS: The association headquarters are maintained at room 636 Southern building, Washington, D. C., with Executive Secretary Richard P. White in charge.

Mr. White knows personally almost every member in the organization, and from his office issues a semi-monthly news-letter to all members.

In addition to keeping members informed in this way about what is going on in the industry, he has a remarkable faculty for helping individual members, usually by return air mail, with problems that they send direct to him.

ORGANIZATION: The organization is democratic in principle, giving all members a chance to function actively.

The United States is divided into six regions, each region represented by one member on the executive committee. The executive committee works the year around (without pay) in connection with Secretary White in general supervision of the affairs of the association.

Within each region A. A. N. members are grouped into chapters, a chapter in most cases including just one state. Delegates from each chapter make up the board of governors, a group of approximately sixty nurserymen, whose duty it is to handle all controversial matters during each annual convention.

MEMBERSHIP: There are at this time about 700 members, each section of the country being well represented. Membership is obtained by filing a written application, usually with the state membership chairman, but di-

rect to Secretary White at Washington, D. C., if more convenient.

Active members are those engaged directly in the nursery business. Associate members are those engaged in allied trades, such as horticultural printers, publishers, supply firms, etc.

DUES: The dues of active members are based on the volume of business transacted, at the rate of \$1 per \$1,000 of business, with a minimum of \$10 per year. To illustrate: A member doing \$1,000 to \$10,000 per year pays annual dues of \$10. A member doing \$15,000 per year pays \$15.

A check to cover annual dues must accompany the application for membership.

Associate members pay a flat membership fee of \$25 per year, with an additional \$20 entrance fee.

The fiscal year of the association dates from July 1 to June 30.

The month of June is the most desirable time to join the association, since dues paid at that time carry the new member until June 30 of the following year.

Attendance at the annual convention in July also offers the best means of getting acquainted.

Any one of the following state membership chairmen will welcome the chance to handle applications for membership:

Alabama—Henry Homer Chase, Chase.
Arkansas—T. L. Jacobs, Rogers.
Colorado—G. A. Tolleson, Denver.
Connecticut—Louis Vanderbrook, Manchester.

Delaware—Clayton Bunting, Selbyville.
Florida—S. B. Simpson, Monticello.

Georgia—Don Hastings, Atlanta.

Indiana—M. B. Esterline, New Augusta.

Iowa—W. A. Hughes, Cedar Rapids.

Kansas—Harold Crawford, Ottawa.

Kentucky—Walter Hillenmeyer, Jr., Lexington.

Maine—Clinton D. Wallace, South Portland.

Maryland—Homer S. Kemp, Princess Anne.

Massachusetts—Lloyd A. Hathaway, North Abington.

Michigan—Harold Paul, Monroe.

Mississippi—H. M. Owen, Columbus.

Nebraska—Vernon Marshall, Arlington.

New Hampshire—Iсаac L. Williams, Exeter.

North Carolina—Sam Tankard, Hickory.

Pennsylvania—Eugene Muller, Norristown.

Rhode Island—V. J. Vanicek, Newport.

South Dakota—H. N. Dybvig, Colton.

Tennessee—Edward Chattin, Winchester.

Utah—Wallace Walton, Salt Lake City.

Virginia—Kenneth McDonald, Hampton.

Washington—W. L. Fulmer, Seattle.

West Virginia—B. L. Potter, Huntington.

Wisconsin—Thomas S. Pinney, Sturgeon Bay.

INVITATIONS FOR 1942.

To Kansas City, Mo.

Competition is already alive for the meeting place of the A. A. N. in 1942, expected to be held in region 4, embracing the southwestern states. The following letter, in behalf of Kansas City, has been sent out by C. A. Chandler, of the Chandler Landscape & Floral Co., Kansas City, Mo.:

It has been my ambition for many years, and that of the several nurserymen in this area, to entertain a convention of the American Nurserymen's Association in Kansas City.

Now that the convention is due to come to region 4, in 1942, it is our sincere hope that you will give Kansas City most favorable consideration, and we would like very much to have your active support when the matter comes before the 1941 convention in July.

We feel that Kansas City is an entirely logical spot for the convention. Our location is very central, both to region 4, and to the country as a whole. Our hotels can take care of the convention most adequately, offering air-conditioned meeting rooms, and air-conditioned sleeping rooms at moderate rates. Kansas City itself is a most beautiful and interesting city to visit, affording unlimited opportunity for recreation and diversion of all kinds.

The Western Association of Nurserymen, which recently met for the forty-ninth time in Kansas City, has for three consecutive years passed a resolution inviting the American Association to meet in Kansas City, and a convention here, consequently, is assured the active support of all the nurserymen in the western area.

To St. Louis.

Recently another urgent invitation, in behalf of St. Louis, was sent out in the following letter from Joseph P. Houlihan, of the Houlihan Nursery Co., Creve Coeur, Mo.:

St. Louis would like to have the 1942 convention of the American Association of Nurserymen, which is due to be held in region 4. There were several cities thinking of inviting in this region, but after sending out a letter to the members in region 4, it seems that the majority favor St. Louis. We hope that this will be your opinion, too.

We believe that St. Louis would be the most logical city because St. Louis has considerably more to offer to the association, both in entertainment and in air-conditioned hotels, which includes air-conditioned sleeping rooms, dining rooms and meeting rooms. St. Louis is probably the only city in this region that can offer a hotel that will house the entire convention under one roof.

Don't you think our members would enjoy seeing the world-renowned municipal opera, a big league baseball game, a moonlight excursion on the palatial steamer Admiral, a visit through the Anheuser-Busch brewery, through the zoological gardens and the Missouri Botanical Garden and other interesting sights?

The members in the St. Louis district can promise their fullest co-operation to help make the convention the most outstanding in the history of the association, if St. Louis is awarded the meeting.

Details in Landscape Planting

By Peter Cascio

In order to make this a complete little story of planting details, I am going to start with the first contact with the client.

The telephone rings. Mr. Smith is on the wire and wants a planting. My answer is, "Mr. Smith, I'll be right over and go over your problem with you right there on the grounds." If he cannot see me right away or I cannot go over, an appointment is made.

When we go to see him, we find out what he wants and talk over appropriate materials. Our suggestion for foundation planting is invariably a planting of materials that will be permanent, such as yews, rhododendrons, Juniperus Sargentii, Juniperus Pfitzeriana, etc. If he wants those nicely-shaped plants, such as arborvitæs and retinisporas, we point out the fact that they get too big, become worse-looking with age and are not permanent. However, we tell him we have such plants and we should sell them cheaply as we should like to get rid of them. We then make out estimates for both types of plants.

We tell the client that the cost depends on the sizes and varieties of plants chosen, and the next step toward a satisfactory transaction would be for him to come to the nursery actually to see the plants and tag them. We offer to take him over right away or make an appointment to meet him there at his convenience.

In his presence we put in stakes for any specimen trees he may want about the house. Stakes are shifted until the client is satisfied. Putting in the stakes gets the trees planted where it is agreed to plant them and saves you a trip back to show your planting foreman where they are to be set. If no stakes are put in and you do plant trees where the client said he wanted them, after the trees are planted he may be quite positive he told you to plant them elsewhere and you may be stuck for a transplanting job.

After the client has picked out the material, an order is made out and a rough sketch is drawn right on the order to show where the plants are

The fine points of securing a landscape order and winning the customer's confidence in its planting, told by a recognized expert, the president of the National Landscape Nurserymen's Association, affiliated with the A. A. N., as he presented these frank comments in the educational program at the annual meeting of the New England Nurserymen's Association.

going. A copy of this order goes to the nursery foreman a day or two before the planting is to go in, and the plants are dug, balled and burlapped. We plant nothing bare-root except newly purchased shrubs which come that way.

If it is an extensive planting, we stake it out and then send over manure and humus, a rubber-tired wheelbarrow and one or more men. They spread the fertilizer and prepare the bed. In a day or two a planting foreman and a gang of about three men arrive with the plants. The trees and shrubs are placed. Nothing is planted without first being placed, turned so the best side is to the front and shifted a few inches this way or that until the plant looks just right. Often the job may take one or more plants than ordered to make it look complete. In that case the client is called out and is shown something more would complete the job. If it is decided to add to the planting, the foreman sends his truck and one of his laborers who can drive back to the nursery with a note to the nursery foreman telling him what is wanted.

After the plants are placed and look just right, the men dig the holes and set the plants in the holes, but do not fill in any soil. The foreman and two men do the actual planting. The foreman holds the plant in just the position he wants it, and the two men shovel soil around it, filling the hole about three-quarters full. The third laborer, after finishing digging

holes, attaches the hose and gives the plants a thorough watering.

When the order has been planted and watered, the holes are filled, and the bed is raked and edged. Around each plant is left a shallow dish to hold water. Tags are removed from plants; all trees are guyed; guy stakes are pounded out of sight, and wires left taut. Guy wires are put through old hose, and three separate pieces of hose are used. The area worked around is neatly raked.

If the new bed is smaller than the one previously there, the unplanted area is seeded. A little seed, hose, pruning shears, a rake and a broom are standard equipment on our trucks.

Broken pieces of shrubs are pruned off. If a piece of Pfitzer juniper or yew is cracked, we insist on its being cut off right away. If it is left, it will probably die slowly through the summer. Gradually it will turn yellow, and what happens? People going by say, "Look at that. Cascio gave them a dead plant." Competitors going by gloat over the incident and hope the client now realizes that he should have had them put in the planting instead. The client calls up, dissatisfied, and you may have to replace the whole plant, whereas a little pruning when it was put in would have saved all this.

We do little pruning before the plants leave the nursery. After the shrubs and trees are planted and while the men are leveling off the bed, the foreman goes through and does a minimum of pruning. If one did a proper pruning job on a shrub just planted, there might be a pretty skimpy shrub left and the customer might think he was not getting his money's worth. Some things have to be pruned severely, but do it on the grounds and, if possible, with the client looking on. In this category would come material such as buddleia, hydrangea, lespedeza, vitex and althaea.

Aside from broken or interfering branches, we do little pruning on newly planted shrubs of usual planting size. However, if they are old

shrubs and have plenty of wood in them, we prune out the oldest of it, leaving a rejuvenated shrub with shape characteristic for its variety.

If the client will let us, we cut back a privet hedge severely. We tell him that if it is cut from twelve to eighteen inches from the ground, he will eventually have a bushier, healthier hedge. Some want it left taller, but we always explain the benefits of severely cutting back so that there will be no comeback later on.

If the client is at hand while work is going on, the planting foreman shows him why he is doing certain things. Let him emphasize in a voice loud enough for the client to hear the different points about planting. Some of the remarks he should shout out are:

"Spread out those roots." . . . "Throw a little humus around the roots." . . . "Leave room for water." . . . "Turn that plant two inches to the right." . . . "Shift the plant three inches toward you." . . . "Now lean it a little forward." . . . "Tamp the dirt well in around the roots." . . . "Here, handle that plant gently, it's alive."

Incidentally, never plant a shrub leaning backward. Leaning a little to the front is all right, but never backward.

The foreman should be courteous. The men should refrain from talking on the job; they should just stick to business and keep moving.

The foreman should show a genuine interest in the planting, giving the client all the maintenance hints he can think of. At least once, and preferably near the end of the planting, the boss should show up to check the job. He should make suggestions if any are needed. Before-and-after pictures of the job could be taken and a copy sent to the client. The boss should stop in occasionally and look over the planting, especially at a time when he knows the client is home. This shows his interest and often leads to further orders. Have your pruning shears in your car, and if there is something that needs cutting off, do it. If a tag has been left on, take it off. Do something to show you are interested in the planting's looking just right. If you think the planting needs watering, ring the doorbell and tell the client so, or call him up about it, or write.

I think one of the main reasons why our work is satisfactory is that we never put in a plant for anybody without a qualified planting foreman in charge of the operation. None of our laborers is ever allowed to put soil around a plant in a hole without the foreman's having first O.K.'d it. The things our foremen are fussiest about are that the plants are placed, spaced and faced correctly, and that the job, once started, is completely and neatly finished. No matter how pressing the next job may be, the one we are working on must be absolutely finished before that gang starts another job.

In planting a shrub border we, of course, keep from putting three plants in a line. The foreman holds a shrub, while one man on each side of him takes a shovelful of soil from where the shrub is going and holds this soil in his shovel. The foreman lowers the plant, and the shovelfuls of soil land on each side of it. This places the plant and protects roots from sun. After all the shrubs are placed this way, the foreman looks them over for proper spacing and moves them a little, if necessary, to get them out of being in lines. The shrubs at the front of the border are always staggered, never set in a row along the edge unless following a curve, when it may be necessary.

If, where the plants are set, conditions are such that you think they will have a deleterious effect on the material the client wants there, be sure and mention it beforehand, as there is sure to be dissatisfaction later on if you do not.

Recently a woman telephoned that she lived next door to grounds where we had planted some trees and she liked the professional way in which we went about our work so much that she wanted to come out that afternoon and select some trees for her own yard. Well, she came over, and she wanted a Norway maple and a sugar maple. I said, "We'll plant them if that is what you want. However, I want to point out that your yard is quite wet. Norway and sugar maples do not like wet locations; so I would recommend you put in an elm and a pin oak." She then asked me why we had put in Norway maple for her neighbor. I answered that he had insisted on that variety and was assuming all responsibility,

that if the tree died he would not hold us responsible. I said, "If you noticed, we planted it about eight inches higher than the surrounding grade and in the spring Mr. Jones is going to fill in from his porch to beyond this tree in order to adjust the grade." I then told her if she chose the elm and pin oak and let us plant them during the winter, we would guarantee them, but we would not guarantee a Norway or sugar maple. She took a pin oak and an elm. I'm sure they'll do well. The maples would have slowly died, and I should have had a dissatisfied customer.

I've come to the conclusion that there is always something about a particular plant that is not good and the longer I stay in business the more I am convinced that to save yourself headaches later on and keep your clients, it is good practice to point out all these features before the work is done.

Before the bill goes to the client, scan it and be sure it is according to agreement.

The four important operations that will give the job a professional look and leave a satisfied customer are placing, spacing, facing and finishing.

FIRE AT DANIELS NURSERY.

Fire at Daniels Nursery, Inc., Long Lake, Minn., May 10, destroyed a large shed and an adjoining tool shed. The larger building, used for packing, contained a small quantity of nursery stock, all of which was destroyed. Firemen from near-by villages worked hard to keep the fire from other buildings and nursery material. Franc P. Daniels has operated this nursery for years.

JARVIS SMITH, for many years associated with the A. W. Smith Co., Pittsburgh, Pa., has taken over the Elliot Nursery Co., Evans City.

IN parts of the east where damage by the elm leaf beetle was heavy last year, clients should be urged to have trees sprayed immediately with three pounds of lead arsenate to fifty gallons of water with a good sticker, aimed at the underside of the leaves. The same spray is to be recommended for the willow leaf beetle and the cankerworms that feed on the foliage of oaks, lindens, etc.

Selection of Broad-leaved Evergreens

By L. C. Chadwick

The group of medium-size broad-leaved evergreens, ranging from six to nine feet in height, contains a number of useful types, although the selected list is not quite so extensive as it was for the small types constituting group IV. Considerable difficulty was experienced in classifying the plants in this group. For the purpose of this classification, the average size of relatively old plants in landscape plantings has been taken as the basis of size in most cases. Because of the various rates of growth, the mature size of some of these plants may or may not be attained in ordinary landscape plantings. While this group V classification is open to criticism, it is felt that it fits the conditions prevailing in the regions under consideration fairly well.

These types of broad-leaved evergreens are adaptable to many uses. There is a wide variation in growth habit, foliage, flower and fruit. Some types, such as *Buxus sempervirens angustifolia*, are rounded, compact and formal; others are upright with drooping branches, as is exemplified by *Cotoneaster salicifolia floccosa*, and still others are more narrow in outline, as is true with *Ilex crenata microphylla* and *Pyracantha coccinea lalandi*. Excellent flowers are presented by such plants as *Kalmia latifolia* and the rhododendrons. The fruits of *Pyracantha coccinea lalandi* are among the most striking of any of our ornamental plants. The plants in this group can be used extensively as specimens, for bed and border planting and to some extent for foundation planting.

Seventy species and varieties are listed. Approximately eleven per cent are in the selected list and should find the most abundant use. Sixty-three per cent are included in the secondary list. Many of these need more extensive trial. Others seemed to have established themselves only as secondary types except in territories outside the regions under consideration. Approximately twenty-six per cent are included as discards. Types which may have more or less extensive use in the upper south are followed by the letter (S). Some types not con-

Medium types of broad-leaved evergreens, ranging from six to nine feet in height, are discussed in this fifth article in a series similar to the treatment of narrow-leaved evergreens and of woody deciduous ornamental plants in "Compiling a New Nursery List," by associate professor of horticulture at Ohio State University.

sidered fully evergreen in our territory are among the leading broad-leaved evergreens of the south. Among those in this group is the common *Abelia grandiflora*. In our territory it is classified as a semievergreen and combines especially well with the broad-leaved evergreens.

SELECTED LIST

- Buxus sempervirens angustifolia*—Willow boxwood.
- Buxus sempervirens arborescens*—Truetree boxwood.
- Cotoneaster salicifolia floccosa*.
- Ilex crenata microphylla*—Littleleaf Japanese holly.
- Kalmia latifolia*—Mountain laurel.
- Pyracantha coccinea lalandi*—Laland fire-thorn.
- Rhododendron maximum album*.
- Rhododendron maximum purpureum*.

SECONDARY LIST

- Berberis stenophylla*.
- Buxus sempervirens*.
- Buxus sempervirens rotundifolia*.
- Choisya ternata*.
- Cotoneaster franchetii* (S).
- Cotoneaster henryana*.
- Cotoneaster rotundifolia*.
- Cotoneaster salicifolia lanata*.
- Cotoneaster salicifolia rugosa*.
- Euonymus japonica* (S).
- Euonymus japonica argenteo-variegata* (S).
- Euonymus japonica pyramidata* (S).
- Fatschedia lizei*.
- Ilex cornuta* (S).
- Ilex cornuta burfordii* (S).
- Ilex crenata buxifolia*.
- Ilex crenata latifolia*.
- Ilex crenata rotundifolia* (S).
- Kalmia latifolia alba*.
- Kalmia latifolia fuscata*.
- Kalmia latifolia rubra*.
- Ligustrum japonicum* (S).
- Ligustrum sinense* (S).
- Mahonia bealii*.
- Osmanthus armatus* (S).
- Osmanthus delavayi* (S).
- Osmanthus fortunei* (S).
- Phillyrea angustifolia decora*.
- Photinia glabra* (S).
- Pyracantha crenato-serrata (gibbsi)* (S).
- Raphiolepis indica* (S).
- Raphiolepis umbellata* (S).

- Rhododendron cunninghamii*.
- Rhododendron decorum*.
- Rhododendron discolor*.
- Rhododendron fargesii*.
- Rhododendron fortunei*.
- Rhododendron keiskei*.
- Rhododendron maximum*.
- Rhododendron smirnowii*.
- Stranvaesia davidiana undulata*.
- Viburnum rhytidophyllum*.

PLANTS TO DISCARD

- Berberis ilicifolia*.
- Berberis pruinosa*.
- Buxus sempervirens aureo-variegata*.
- Buxus sempervirens bullata*.
- Buxus sempervirens glauca*.
- Buxus sempervirens marginata*.
- Buxus sempervirens pendula*.
- Euonymus japonica albo-marginata*.
- Euonymus japonica aureo-marginata*.
- Euonymus japonica aureo-variegata*.
- Euonymus japonica fastigiata*.
- Euonymus japonica viridi-variegata* (Duc d' Anjou).

- Ilex crenata* (S).
- Mahonia fremontii*.
- Mahonia pinnata*.
- Pyracantha coccinea*.
- Stranvaesia davidiana*.
- Stranvaesia davidiana salicifolia*.

Buxus sempervirens angustifolia, willow boxwood, is one of the most satisfactory boxwoods. Coming well within the limits of this size group at maturity, it possesses a compact, formal habit of growth and relatively narrow, oblong, glossy green leaves. The leaves are about one inch long, tapered to the rounded leaf tip. Like all the varieties of *Buxus sempervirens*, it is on the border line for hardiness in our territory, but has proved somewhat more reliable than some of the other varieties. Boxwoods are best when not exposed to sweeping winds and when given partial shade. Plants should be provided with ample moisture. This is especially important during the fall months before the ground freezes. Watering during the winter when the ground is not frozen has proved advantageous in some sections. The willow boxwood can be used as a formal specimen in the foundation planting, especially as entrance plants for large homes, as formal specimens elsewhere and for bed and border plantings, and it makes a fine hedge plant.

Buxus sempervirens arborescens, truetree boxwood, is a tall shrub or even a small tree of informal growth and has dark green elliptic leaves. It is looser and much more informal in its growth habit than *Buxus semp-*

virens angustifolia. Cultural requirements are similar to those of the willow box, and it is especially useful where informality in a boxwood is desired.

The species, *Buxus sempervirens*, and its variety *Buxus sempervirens rotundifolia* have been placed on the secondary list. Considerable quantity of the common boxwood is, and still will continue to be, grown in nurseries and used in landscape plantings. In most cases, however, it would seem advisable to devote the nursery production to one of the better named varieties. *Buxus sempervirens* is listed as hardy in zone 6, possibly some varieties in zone 5. *Buxus sempervirens rotundifolia*, with its oval, broad ovate or obovate leaves, emarginate at the tip, deserves further trial, but at present does not seem to be quite so satisfactory as the two varieties in the selected list. It has a dense rounded habit of growth.

Buxus sempervirens aureo-variegata, *bullata*, *glauca*, *marginata* and *pendula* are relegated to the discard list as they possess few characteristics not exhibited by some of the better varieties mentioned above. The varietal name "latifolia" is not recognized, and the plants formerly carried under this name have been included in part under *Buxus sempervirens rotundifolia* and in part under *Buxus sempervirens bullata*.

Cotoneaster salicifolia floccosa is an upright-spreading shrub with drooping branches and narrow, lustrous, dark green leaves. Where hardy it reaches a height at maturity of about ten feet. It is probably hardy in zone 5. When young leaves are woolly beneath, but at maturity they are at least partly glabrous. Its white flowers produced in late May or June are showy, and the bright red fruits are especially attractive. In the colder climates flowers and fruits are frequently absent, but even in such cases the growth habit and foliage are sufficiently attractive to warrant its use in protected situations.

This cotoneaster, like most other species of the genus, prefers a well drained, loamy soil and sunny exposure. It may be used for foundation planting, beds and borders. This variety is said to be especially satisfactory in eastern Virginia and similar localities.

Cotoneaster salicifolia, the willow-leaf cotoneaster, and its variety *rugosa* are placed in the secondary

group. *Cotoneaster salicifolia* is similar to the variety described except that the leaves are somewhat more ovate, and it is less hardy. It is said to be somewhat unsatisfactory in some parts of the south. It is quite subject to fire blight. The variety *floccosa* seems to be somewhat more resistant. *Cotoneaster salicifolia rugosa* possesses dark green, rugose leaves that are woolly tomentose beneath. It does not seem quite so hardy as *Cotoneaster salicifolia floccosa*.

Other species on the secondary list are *Cotoneaster francheti*, a semi-evergreen type of pendulous habit, said to be especially desirable in the

as being hardy in zone 5 but, nevertheless, is somewhat tender in exposed situations in our territory. It should be protected from sweeping winds, supplied with ample water in the fall and mulched during the winter.

As a specimen it exhibits a stiff, picturesque appearance, and its twiggy branches stand shearing so well that it makes an ideal hedge where it is not subject to winter injury.

Three varieties of the Japanese holly are placed in the secondary list. *Ilex crenata buxifolia* is described as being of columnar growth habit and having glossy green leaves. It needs further trial. *Ilex crenata latifolia* is probably identical with the species although described by some as being superior to it and possessing a more columnar habit of growth. *Ilex crenata rotundifolia* is an upright compact variety with shiny green foliage and black berries. It is said to be as hardy as the little-leaf Japanese holly and more hardy than the species or the other varieties mentioned. It is probably the best of all the upright types in some sections of the upper south, and its appearance in our territory so far warrants a more extensive trial.

Ilex crenata has been relegated to the discard list because it is rela-
[Continued on page 30.]



The "Lyre Tree."

upper south; *Cotoneaster henryana*, a tender type similar to the willow-leaf cotoneaster, and *Cotoneaster rotundifolia* and its variety *lanata*, attractive with their masses of long arching branches but somewhat tender. These types are either semi-evergreen or doubtfully hardy in our territory.

Ilex crenata microphylla, littleleaf Japanese holly, is a much-branched shrub of irregular outline, crowded with small, shining, dark green leaves, elliptic to oblong in outline and about one-half inch in length. Small specimens are often quite stiff and upright. The flowers are unimportant from a landscape point of view, but the small black fruits are attractive. It prefers a well drained soil, but one retentive of moisture, and partially shaded situations. It is designated

THE "LYRE TREE."

On the edge of the North River cemetery, at Colrain, Mass., is a huge elm that Robert Ripley has designated the "biggest lyre" in the world. Accompanying the picture which appears on this page, the following notes about the tree appeared recently in the *Rural New Yorker*:

"In 1847, James Brainard Cromack, a lad of 14, worked on the farm which is now a part of the cemetery. Around the farm was a brush fence such as was common in those days, and this tree was felled by the lad to reinforce the fence beside the tree.

"The tree started growing in its present shape. Some other tree might have died, but the elm, being hardy, sent up the growth from the fallen trunk.

"Bordering the highway, this tree has attracted attention for many years and it is well past the century mark, as Mr. Cromack would be 107 years old if living today."

Excerpts from a Plantsman's Notebook

By C. W. Wood

Inula Helenium.

(May 1, 1940.) Several factors have contributed, no doubt, to the partial eclipse of elecampane. Perhaps not the least has been the general neglect of old-fashioned flowers. Now that the latter are being brought to light by the interest in herb gardens, we may look for elecampane to come back. And by its return to favor, borders will be blessed by another July producer of gold. I have lately found a form of this inula, first bought as *I. magnifica*, which I notice has now been changed to *I. Helenium Magnificent*, which is likely to add impetus to its return to favor. The introducer says it will grow over seven feet tall, and it no doubt will in rich soil, for it makes up to 6-foot growths here. Put on 7-foot stems big golden suns whose long narrow rays are far from sunflower effects, and you have a plant that attracts immediate attention in July. Elecampane is an indestructible perennial which has naturalized itself in parts of the United States; so one need not worry about its ability to get along in our climate. It is easily propagated from seeds.

Jeffersonia Dubia.

(May 1, 1941.) The genus *jeffersonia*, which commemorates our third president, is represented by two species, *J. diphylla*, the twinleaf of eastern woodlands, and *J. dubia*, of northeastern Asia, and adds another instance of genera which occur in these two widely separated areas with no known connecting links. That in itself is a fascinating subject for the plant student, but the beauty of the Asiatic representative is, or should be, of interest to every gardener and plant grower. I believe *J. dubia* is little known in this country. Anyway, a careful search of my catalogue file reveals only one source of supply. Considering its ease of culture and all-around beauty, it would seem that neighborhood growers with a clientele that wants rarities regardless of price have a splendid item here. As to culture, it does splendidly here in leafy soil in shade, sending up its

More comments on the usefulness, propagation and culture of less common herbaceous perennials that are of interest particularly to the neighborhood grower, tested and studied in recent seasons in the writer's nursery in northern Michigan.

5-inch flowering stems each spring soon after the sun releases our northern soil from the hold of frost. I know of no lovelier picture than a group of this *jeffersonia* displaying its many lovely blue saucers over the partly expanded reddish foliage. This spring it was in full bloom by mid-April, two or three weeks before its normal time, and will continue for four to six weeks, depending upon the weather. Its propagation is not rapid, seedage being slow, because seeds are seldom available, and division being not much faster. The latter is probably best undertaken soon after the flowering season.

Onosma Stellulatum Tauricum.

(May 1, 1940.) Several years ago the golden drop, *Onosma stellulatum tauricum*, had a place in many plant catalogues and in not a few neighborhood nurseries; now one seldom sees it. I have asked a number of growers why they no longer listed it and am told that the plant is short-lived. That is only relatively true, however, for I have plants in the garden that are all of 15 years old, and they are bigger, better and more beautiful than they ever were. I suspect that it is largely a matter of drainage and exposure. All onosmas that I know require perfect drainage. That is easily secured in light sandy soil. If one operates on clay, that is another matter. Then the plant should be grown in specially prepared beds and, when planted out permanently, put in a raised position, as in a wall, where it never has wet feet and will be in full sun.

The plant is worth that trouble, too, not only for its lovely golden

drops strung along graceful 18-inch stems, during June and July, but also for its fountains of silvery foliage. It may be grown from seeds, which are usually available in this country, and from cuttings. The latter, taken soon after flowering and inserted in sand in a shaded outdoor frame, will be ready for lining out the following spring.

Pink-flowered Yucca.

(May 2, 1941.) As the so-called pink-flowered yucca (*hesperaloe* of botanists) is getting much publicity in amateur garden magazines and gardeners are asking for the plant, I thought that my brief experience with it might be of interest to American Nurseryman readers. First of all, I should say that the plant is not reliably hardy this far north, as indicated by a well mulched 2-year-old plant succumbing to the cold of last winter, which was a remarkably mild one in this section. That fact will not discourage keen amateurs from growing it, however, for the plant is so easily manipulated that it may be taken up in autumn, have its roots pruned to fit an ordinary pot and be wintered in a cellar.

I cannot say from experience about its flowering habits, except that its coral-pink bells are produced over a long period, continuing until frost puts a stop to the performance. In Texas, where it is said to grow naturally near Austin, one hears of 9-foot flowering stems, though I suspect from other informants that the usual height seldom exceeds six feet. In either case the plant would be an imposing sight—one that is going to attract gardeners in all sections where the plant is hardy. I understand that it grows outdoors without protection in the Missouri Botanical Garden, but I imagine that young stock would need mulching even there during the first year or two. Farther south it is said to be evergreen, and then its fountain of narrow leaves, threaded at the margins, would be decorative throughout the year. Although the plant grows naturally under conditions similar to

that favored by cacti, it responds well to the better treatment given garden plants. Growers in the southwest say it may be transplanted at any season, even when in bloom. In that case, it should be balled, they say, as one handles evergreens, but may be handled bare-root during the dormant period.

The literature does not so state the case and my lack of experience does not allow a positive statement on the subject, but, judging by the close similarity in the appearance of *hesperaloe* and *yucca*, I suspect that the methods employed with the latter would work equally well with *hesperaloe*. A brief outline of the vegetative reproduction of *yuccas* will therefore be appended to these notes. Many species—in fact, most that I have handled—produce short rhizomatous stems, gradually forming clumps. It is then an easy matter to increase one's stock by division. More rapid increase is to be had, however, by removing these underground growths, cutting them into short lengths, like other root cuttings, and planting them in sandy soil in a warm propagating frame or bench. Another method sometimes employed involves use of the entire plant, the roots handled as mentioned before and the thickened portion above-ground (what the botanists call the stem) as follows: Saw the stem in half, lengthwise, and plunge, cut side down, in a warm bench. The dormant buds along the stem will soon start to grow and may be cut off when large enough to handle. These placed in pots of sandy soil and put back in the same frame or bench, where they will develop a root system, are ready to be lined out as soon as thoroughly established.

Phlox Diffusa.

(May 3, 1941.) Although western phloxes have a bad name among eastern gardeners and nurserymen, often with good reason, *P. diffusa* should not be numbered in that class, if one is to judge by experience here. Excepting *P. adsurgens*, which was rather fully discussed in this column recently, *P. diffusa* is one of the most amenable species that I have grown, doing quite well here in almost pure sand and gravel to the depth of six inches, under which is a layer of leafy soil and gravel. That and full sun (perhaps dappled shade in hot sec-

tions) seem to suit it quite well. As I have said before, these western plants which have long been considered too temperamental will often settle down in gardens when the right conditions are found.

Another point to be considered in the taming of western wildings is the different reactions of individual plants to garden ways, one absolutely refusing to have anything to do with the gardener while another of the same species may be perfectly amiable. That is why I always like to start an adventure with seeds rather than plants. Take, for instance, the western irises, which I find quite impossible to establish in plants, while home-grown seedlings of most kinds are easily satisfied. The same conditions prevail among the phloxes, the only disadvantage being in the wait of a year or two. Growing western phloxes from seeds has the added advantage of supplying one with a rather wide range of colors, which in our present plant may run all the way from pure white through shades of pink to lavender. It is always, so far as I have seen, quite prostrate, its woody stems hugging the ground. It is, in my opinion, worth repeated trials in the east until we segregate kinds that can be easily handled in the ordinary garden. In the meantime, it should be a good item for the specialist and the grower of out-of-ordinary material.

Anemone Vernalis.

(May 3, 1941.) A reader, who has recently come into possession of Farmer's "Rock Garden" and has read his poetic flights wherein he calls the "lady of the snows," *Anemone vernalis*, "a mystic water-lily tasseled with fire—an opalescent pearl within, ashimmer with gold and violet silk, iridescent as it catches the sun in countless shifting shades of lilac and fawn and milk," wants to know how to propagate and grow the beauty. The few that I have owned have been grown from seeds—not a difficult matter if fresh seeds are sown in an outdoor frame as soon as ripe or at least the following autumn. They are little, if any, slower or more difficult to handle than the ordinary pasqueflower. Although I have never tried it, nor have I seen it mentioned in the literature, I believe it would be worth the risk to try to grow the plant from root cuttings, after the manner used in propagating the pasqueflower,

using the fleshy roots cut in 2-inch lengths. The cuttings are best made before growth starts, preferably in winter if one has a propagating house, planted upright in sandy soil, in which the tops are covered one-half inch or so. They may then be potted off singly when large enough to handle and lined out after settled weather arrives.

Primula Wardii.

(May 5, 1941.) Another inquiry asks for comments on *Primula Wardii* and especially its culture. This is one of the auriculatae section, of which *P. involucrata* and *P. rosea* are perhaps the best known. In fact, our present plant is likely no more than a geographical form of *P. involucrata*. It differs in being a slightly larger and taller plant than the 6-inch *involucrata*, and the flower color varies from pink through shades of lavender to pale lilac, while true *involucrata* is white. All the species of this section with which I am familiar require a rich moist soil and, in this climate at least, shade. Unless one can supply those needs, and especially that of constant moisture, as along a stream bank where the plants can bathe their toes in water at all times or in well drained soil at the edge of a marsh, there is little enjoyment to be had from these moisture lovers, and unless one has customers who can and will give them that kind of home, there is nothing but grief for the grower. When given their wants, there are, however, few easier or more satisfying primulas. *P. Wardii*, which some botanists say should be called *P. yangtongensis*, was fully hardy here, despite its origin in western China, many of whose plants cannot stand our winters. It is easily propagated from fresh seeds and may also be grown from divisions.

Geum Waightii Brilliant.

(May 5, 1941.) The blooming this spring of *Geum Waightii Brilliant* reminds me that this rather new item holds much promise for the gardeners and growers of this country. In addition to being fully hardy here, it has the added advantage of ease of culture, being like one of its parents, *G. Borisii*, itself a hybrid, in that respect. In fact, it is like a dwarf *Borisii* in leafage and flower, but has a much longer flowering season. Here, if it does not suffer from dry weather, it

commences to bloom in May (this year in late April) and continues until July, with another flurry of its brilliant orange-scarlet flowers in autumn. It does best here in part shade in a leafy soil. It is a hearty grower and so may be rapidly multiplied by division.

Alyssum Spinosum.

(March 21, 1941.) It seems that gardeners do not have, with droughts, insects, plant diseases, etc., enough to contend with. We just become well acquainted with a plant and some botanist comes along and changes its name. I have known and admired for years a little woody-stemmed perennial crucifer from southern Europe as Alyssum spinosum, but am now told that I must change a long-established habit and call it *Ptilotrichum spinosum*. I doubt if I ever make the change; certainly, I cannot without more effort than has been applied to the task so far. So I continue to address it as it appears at the head of this note.

Generally speaking, alyssums are not among my favorites, their weediness and the brassy yellow of many

and for two months or more, ending here in late June or July, covers itself in a mantel of white cross-flowers.

Although from southern Europe, it is quite hardy here; so much so in fact, that I have never lost a plant. All it needs is a poor sandy soil, sunshine and protection from cold winter winds. The books say to grow it from nearly ripe cuttings, which is the plan I have always followed until recently. Year before last I was in a hurry to start the cuttings and took them while they were still soft, and the result was close to 100 per cent strike within twenty days instead of perhaps twenty per cent in two months when hard cuttings were used.

WISCONSIN OFFICERS.

James Livingstone, reelected president of the Wisconsin Nurserymen's Association recently, has a first-hand knowledge of plants he gained from a lifetime experience with them. He was born in Scotland in 1871 and came to America in 1895, having charge of gardens on private estates in the east and middle west until he accepted his present position, superintendent of the nurseries of the Holton & Hunkel Co., Brown Deer, Milwaukee, Wis., in 1925. While he is quiet and retiring, his executive capacity has been acknowledged by several organizations besides that of the nurserymen of his state. He has served as president and vice-president of the Wisconsin Horticultural Society, as president and secretary of the Lake Geneva Gardeners' and Foremen's Association, as treasurer of the Milwaukee Florists' Club for fifteen years and as president and vice-president of the Milwaukee St. Andrew's Society.

For the past three years H. W. Riggert has held the office of secretary and treasurer of the association and is still serving in that capacity.

Born at Wabasha, Minn., he moved during childhood with his parents to Reedsburg, Wis., where he finished high school. He attended business college in Chicago, Ill., and returned to Reedsburg, where he was employed by the Citizens' State bank as clerk, later becoming its cashier.

He married the daughter of A. J. Edwards, president of Coe, Converse & Edwards Co., Fort Atkinson, Wis. After the death of R. J. Coe and D. C. Converse, Mr. Riggert became

interested in the firm in March, 1926, becoming its treasurer.

MECHANICS' LIEN LAW.

In the same month that New York state nurserymen secured the amendment to their mechanics' lien law published in the preceding issue, a similar bill was signed by Governor Edison and thus became incorporated into the laws of the state of New Jersey.

Under the provisions of this law, a property shall be liable for any



R. W. Riggert.

debt contracted or owing to any person, and the debt shall be a lien upon such property whereon improvements have been made to the land by sodding, seeding or planting thereon shrubs, trees, plants, flowers or nursery products of any kind or description, or by grading, filling or landscaping. The debt shall include all debts contracted by the owner or owners thereof for labor performed or materials furnished in and about such improvements.

The mechanics' lien law thus extends to the nurserymen the same protection afforded other material men and laborers.

The New Jersey Association of Nurserymen has had this bill on its program for eighteen years. Similar legislation is pending in other states.

A TALK on "The Care of Patented Roses" was given recently by John W. Edwards, Lawndale, Cal., at a meeting of the Lomita Park-San Bruno Garden Club, at San Bruno.



James Livingstone.

kinds being against them. Neither of these faults can be held against our present plant, however, for it makes so few seeds that vegetative reproduction has to be used, and its flowers are pure white (slightly tinged pink in variety *roseum*). It makes a little bushy hummock to the height of six inches and maybe twice that across, clothed in spiny, silvery leaves,

Coming Events

OKLAHOMA PROGRAM.

The summer meeting of the Oklahoma State Nurserymen's Association will be held at the Hotel Mayo, Tulsa, Okla., June 18 and 19. The program follows:

JUNE 18, 10 A. M.

Registration and payment of dues.
Session of the executive committee.
Session of landscape men.

JUNE 18, 1:30 P. M.

Invocation, by Dr. Claude E. Hill, pastor of First Christian Church, Tulsa.
Address of welcome, by C. H. Veale, mayor of Tulsa.

Response, by C. E. Garee, Noble.

"Value to Nurserymen of F. H. A. Landscaping," by N. D. Woods, Oklahoma City.

"The Use of Nursery Stock in the Defense Program and How Nurserymen Can Coöperate," by Paul V. Baker, Enid.

"Results of Fruit Experiments and Varieties Best for Oklahoma," by Dr. Frank B. Cross, department of horticulture, Stillwater.

"Fall Outlook and Available Stock," by Steve Verhalen, Scottsville, Tex.

Introduction of visitors and out-of-state nurserymen, by C. Y. Higdon, Oklahoma City.

Nurserymen's forum.

JUNE 18, 7 P. M.

Banquet, with A. C. Border, chairman of agricultural department of the Tulsa chamber of commerce, as master of ceremonies.

JUNE 19, 10 A. M.

Unfinished business.

New business.

Sight-seeing tour, led by Phil Thomas, Tulsa.

Barbecue and picnic at Mohawk park as guests of the Tulsa Nurserymen's Association.

The ladies of the Tulsa Nurserymen's Association will entertain the wives of attending nurserymen, June 18 at 2 p. m.

Arrangements have been made for a day's outing at the Grand river power dam, June 20. A boat trip of thirty miles around the lake with a view of the \$23,000,000 power plant has been arranged at a cost of \$1. For a week-end trip, there are cottages and other camping facilities, fishing and boating. For reservations, write to C. E. Stephens, 1232 South Harvard, Tulsa.

ALABAMA PROGRAM.

The annual meeting of the Alabama State Nurserymen's and Florists' Association will be held at Conner hall, Alabama Polytechnic Institute, Auburn, June 16 and 17. The

program for nurserymen follows, a separate program for florists occupying the afternoon of June 16:

JUNE 16, 9:00 A. M.

Welcome, by Dr. L. N. Duncan, president, Alabama Polytechnic Institute.

Address on the development of the nursery and florists' industry in Alabama, by Haygood Paterson, Sr., commissioner, state department of agriculture and industries.

JUNE 16, 1:30 P. M.

Meeting of the nurserymen, Tom Dodd, Sr., Semmes presiding.

Panel discussion on the culture of azaleas and camellias: "Propagation and Culture," by Gregory Smith, Flowerwood Nurseries, Mobile, and "Insect Pests," by G. L. Turnipseed, field laboratory, Alabama experiment station, Springhill.

"New Varieties of Ornamental Plants Adapted to Southern Conditions," by Henry Homer Chase, Chase Nursery Co., Chase.

"Lawn Grasses and Their Use," by Dr. D. G. Sturkie, department of agronomy and soils, Alabama Polytechnic Institute.

"Landscape Development of Small Homes," by E. W. McElwee, department of horticulture and forestry, Alabama Polytechnic Institute.

JUNE 16, 7:30 P. M.

Barbecue, amphitheater, Bibb Graves center, with color films on the nursery and florists' industry in Alabama, presented by Mr. Baker, department of agriculture and industries, Montgomery.

JUNE 17, 8:30 A. M.

Joint session, W. W. Paterson, presiding.

"Modern Bookkeeping for the Florist and Nurseryman," by Mrs. Esther McKinstry, McKinstry Flowers, Birmingham.

"Profits for the Retailer," by Vernon Harris, Birmingham, for the florist, and Stuart Washburn, Bolling Nurseries, Bolling, for the nurseryman.

"Recent Developments in Research Important to Both the Florist and Nurseryman," by Dr. L. C. Chadwick, associate professor of floriculture, Ohio State University, Columbus.

Business session.

Barbecue, given by the Hall Wholesale Floral Co., Opelika.

FLORIDA MEETING.

Nurserymen of the state held afternoon group meetings during the twentieth annual convention of the Florida State Florists' Association at Jacksonville May 19 and 20. M. J. Soule, St. Petersburg, presided over the nurserymen's group, with P. D. Shoemaker secretary pro tem. Harry M. Smith, Winter Garden, was elected vice-president for the coming year to serve on the state association board and to preside at all meetings of the group. George L. Taber, Glen St. Mary, was elected to serve as vice-

AMERICAN NURSERYMAN

chairman of the group in the absence of the presiding officer.

As guest speaker Dr. R. V. Allison, of the University of Florida, Gainesville, made an interesting talk on "Soil and Plant Relationship." This was followed by a round-table discussion, which was beneficial to the entire membership. Dr. Allison was asked to address the nursery group again next year.

C. Leslie Whipp was selected by the board to act as secretary for the coming year. Orlando was selected as the 1942 meeting place.

LOUISIANA MEETING.

At the annual meeting of the Louisiana State Horticultural Association, at Baton Rouge, May 19 and 20, Elmer A. Farley, New Orleans, was elected vice-president representing the nurserymen's group. Dan A. Newsham, New Orleans florist, was elected president, and George P. Dupuy, New Orleans, was re-elected secretary-treasurer. Paul Abele, New Orleans, was elected director at large.

W. E. Anderson, state entomologist, called the meeting to order as convention chairman. Governor Sam Jones and Commissioner of Agriculture Harry D. Wilson both addressed the gathering. Clinics for nurserymen's operations occupied the two afternoons. Visitors from Texas included Steve Verhalen, Scottsville.

ST. LOUIS GROUP MEETS.

The Landscape and Nurserymen's Association of Greater St. Louis met at the offices of Charles W. Fullgraf, Clayton, Mo., May 12. Chairman Howard E. Ward presided. Twenty members and Mr. Dening and Mr. Goff, state plant inspectors, were present.

Mr. Goff spoke briefly on the program for the Japanese beetle work for the coming season, in coöperation with the United States Department of Agriculture.

The June meeting of this organization will be held at the sales grounds of A. Waldbart & Sons Nursery Co., at Natural Bridge and Hunt roads, in the evening. The July meeting will be held at the clubhouse of Francis Bender, Peruque, Mo., Sunday afternoon, July 13, when the host will entertain with a fish fry and fishing party.

Oregon Association Spring Meeting

By Henry Hartman

The annual spring meeting of the Oregon Association of Nurserymen took place at Corvallis, May 21 and 22, on the Oregon State College campus. The program was provided largely by the experiment station staff, and only a few items of business were considered.

The morning session May 21 was attended principally by the advisory board, representatives of the department of agriculture and representatives of the college. At this session the nursery research program was discussed.

In the absence of President Wayne Magill, the afternoon session May 21 was called to order by the vice-president, Armin Doerner. After a few remarks, Mr. Doerner turned the meeting over to the experiment station staff, and R. S. Besse, assistant director, discussed research as it affects the nursery industry. He outlined the problems under investigation and gave an accounting of the expenditure of the nursery research appropriation.

At this session a number of talks were given on sprays and pest control. Kenneth Gray, associate entomologist, discussed spray equipment and the application of sprays. He stressed the importance of thorough spraying and the application of sprays at the right time.

R. H. Robinson, station chemist, discussed spray materials. Sulphur and copper are still the leading fungicides, although some of the new sprays are promising. Rotenone and pyrethrum extracts are commanding more attention in the field of insecticides. These are effective in dust form as well as in liquid sprays. These materials, however, must not be combined with substances that are alkaline in nature. They lose their effectiveness when used in conjunction with lime-sulphur, Bordeaux mixture or with dusts or spreaders that contain lime.

Because of the possibility of injury to growing vegetation, the use of oil sprays in summer should be confined to light oils or oils of low viscosity, and to oils that are fairly pure. Dusting materials are more effective when

they contain a small amount of oil.

John Milbrath, assistant pathologist, pointed out that spraying is not the only means of combating diseases. Sanitation, crop rotation, roguing and careful selection of propagating material are of equal importance. Black canker of broad-leaved evergreen cuttings was investigated during the past year. The investigations showed that the trouble is caused by sunburn shortly after the cuttings are lined out in the field. Shading of the basal portion of the cuttings for a few weeks after lining out eliminates the difficulty. Shading can be accomplished by placing small mounds of dirt on the sunny side of the cuttings.

The control of insect pests was discussed by Joe Shuh, assistant entomologist, who showed slides depicting the life habits of a number of insects common to nursery stocks, and outlined control measures known.

Dr. R. E. Stephenson, professor of soils, pointed out that chemical analysis, while valuable in determining soil ailments, has definite limitations. It may indicate the total amount of plant food present, but it does not show how much of the nutrients are available to plants at any one time. Deficiencies of minor plant food elements cannot be determined by chemical analysis. The physical properties of soil, which may be as important as plant food materials, are not revealed by chemical analysis.

The evening of May 21 was given over to a picnic, held at Avery park, the Corvallis municipal park. A barbecued dinner was served, after which the members were called upon for short speeches. Frank McKennon, of the state department of agriculture, acted as master of ceremonies.

A varied program was presented at the morning session of May 22. Dr. C. E. Owens, plant pathologist, spoke on leaf curl of peaches and certain species of ornamental prunus. This disease, which is common to most sections where peaches are grown, is caused by a specific fungus. It is effectively controlled by the application of either lime-sulphur or Bordeaux mixture during the dormant

season. For Oregon conditions he advised spraying during December or January. He recommended continuance of the practice of dipping nursery stock to control this disease.

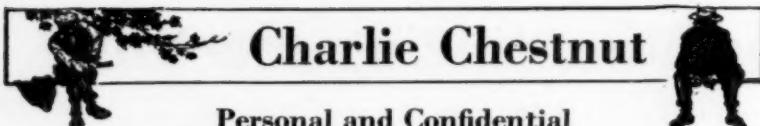
Methyl bromide fumigation was discussed by Dr. D. C. Mote, entomologist. He told of plans for the experimental fumigatorium which is to be erected at the station. Experiments on the fumigation of nursery stock were reviewed.

Virus troubles of fruit plants were discussed by Dr. S. M. Zeller, who laid emphasis on roguing and careful selection of propagation materials as prime factors in elimination of virus diseases from nursery stock. The speaker discussed the so-called "X" disease of peach trees. A survey of all peach stocks made at the close of the past season revealed no trace of "X" disease in Oregon nurseries.

J. S. Wieman, state department of agriculture, spoke briefly of the provisions of the new nurserymen's law, enacted at the last session of the legislature. The new law is essentially the same as the old, except that it sets up a slightly different scale of fees and makes some new provisions regarding the issuance of licenses.

L. E. Harris, associate agronomist, reviewed experiments on the eradication of weeds by selective sprays and tillage. Summer fallow and frequent summer tillage have reduced morning glory (bindweed) infestation by eighty per cent in eastern Oregon wheat fields. Selective sprays consisting of ammonium sulphate and Synox have proved effective in keeping down the weed population in fields of flax. Weed control in lawns was discussed, and the nurserymen were shown views of a number of lawn plots recently treated with selective sprays.

During the afternoon of May 22, the group was taken on a tour of the campus plantings. This was conducted by A. L. Peck, professor of landscape architecture. The visitors were given an opportunity to see the new college gardens, which contain a large collection of varieties of irises, peonies, roses, azaleas and other plants. The plant materials for these gardens were donated largely by Oregon nurserymen.



Charlie Chestnut

Personal and Confidential

MR. T. M. McGuire,
President of the Boat.

Dear Sir:

Well, Mr. McGuire, it looks for sure now like we done it. We sure put over the boat trip together. A lot of the members (that is all except one member from Michigan) was saying that they couldnt never be talked into the notion of a boat ride instead of a regular old time convention. Thats the way they were talking when I got to New York last summer, but that was before I got in my work. All along I have been expecting to hear from you before this, as the committee kept telling me that "Mac will take care of you", but you aint wrote me or nothing, so I figure its time we should get together a little. After all, who do you suppose it was that swung the delegates in New York. Some of the members swung hard, Mr. McGuire, but I done it. Probably if it hadnt been for me, it would be a different story, and now you would be working on the street sweepers union for the July 7th trip, instead of with the nurserymen.

When I took it up with the committee to see that I got the proper recognition for my work, you know what I mean, Mr. McGuire, they all said they couldnt do nothing for me, and that I should go to work and take it up with the president of the boat. "Take it up with Mac," they all said. Thats how it comes I am writing to you personal to lay my cards on the table and see what you can do for me.

Almost any kind of part time work on the boat would fix things up O.K. Emil has promised me time off with no pay cut, but he says if I get to go on the boat its up to me to work my way. He aint putting out anything for that. So in other words, I aint going to have an expense account the way it looks now, and you know what a handicap that will be.

I figure if I should go to work and give you a few pointers, it might be worth your while to keep me in mind. For instance, probably you have had other outfits on your boat before, but the chances are you aint never had any nurserymen, and you dont know what you are up against. Say you have been having five house detectives

for your regular run. Well, that aint going to do the trick. It will take six at least, and one should be a nurseryman which knows how to handle the members. Many is the time I have been called in on that work when the house detectives has got both hands full. With me as a plain clothed man, you aint got a thing to worry about. Otherwise anything loose on the boat that aint spiked down is liable to disappear. Stuff like silverware, etc., etc., which I will look after will more than pay my way.

I got some other ideas where you might work me in on the pay roll. I see by the papers there is three bars on the boat. If you would take a suggestion from an old time nurseryman, I can warn you that it will be best to close up two bars and have me at the door where the one bar is open. If any of the members starts to throw furniture like chairs, etc., etc., into the ocean, I will pitch in and throw the member in too, so that he will have to swim out and retrieve the chairs, etc., etc., which he has thrown in the ocean. Furniture aint free, you know that, or you should look up your invoices.

Dont think now, Mr. McGuire,

that there aint going to be a certain amount of argument at the bar. Most of the members are from the country and they have been brought up on a good 5c short beer. When you ask 10c there's bound to be trouble, so you better think this over carefully. Probably you better call the board of directors in on it. After all, chairs, etc., etc., and spoons, etc., etc., cost money.

Getting back again to the bar situation. How are you fixed for bartenders? Take it during the rush hour when the members are bound to demand prompt attention and no fooling around. They are liable to pound on the bar with both fists and shake it loose. In such an emergency, I could jump in and draw beer as fast as any union man you have got. Then I can save you a lot of money on fancy drinks. I know what the members will be looking for. It aint no use to stock up on anything but straight drinking whiskey and beer. You will do better on 5c beer and 10c whiskey.

From what I picked up at the convention in Chicago last January, I understand that there is some of the members from the south, I wont say where, but one certain southern state in particular, is planning on bringing aboard a few crocks of good corn, but I can get that idea killed if you give me a little cooperation like I got outlined.

I dont aim to force you into anything, but if you cant use me on de-

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ARTHUR DUMMETT
61 W. Grand St., Mt. Vernon, N. Y.

tective work or tending bar, what about exhibits? I aint seen a word about exhibits in your fancy folder. Now Mr. McGuire, you are making a bum guess if you think the members aint going to drag in a certain amount of bushes and tractors, etc., etc. They will be looking for the exhibit room. They have been doing it for 50 years, and I aint going to stand back and let that old custom die out. Conventions without exhibits is like cornbeef and cabbage without cornbeef. If you and I can get together, I can get the whole thing hushed up, but otherwise I will set up a whispering campaign and an agitation for a big exhibit hall with me in charge as watchman at so much. Take your pick, Mr. McGuire, if its exhibits or not. Its up to you.

Now, Mr. McGuire, I got lots of other ideas that seem like to me ought to get me in hearing before your board of directors. For instance, you aint been going to the nursery conventions like me, man and boy, for 20 years. You dont know how many members you got which comes to conventions and take up valuable space standing in the lobby of the hotel, and they dont spend a dime there. They sleep at the Y.M.C.A., do their own laundry, and eat their meals in the cafeteria across the street, if they dont get invited for lunch by a wholesale salesman, which aint likely to happen very often.

Now dont say, "so what," Mr. McGuire until I get through telling you a few things. As I was saying, I figure there is 38% of the members which is dead heading their way through the conventions. During the worst years of the depression, it got up to 95%. Only 5% of the members stayed in the convention hotel, and one-half of them was officers with free rooms.

Now Mr. McGuire, does that give you any idea as to how to salvage anything on these members? Probably you figure that they are a total loss, but I got an idea on how you can cash in on this group. They want to go on the boat, but they aint got \$44.50 or whatever it is. Why dont you go to work and clear out the hold and run in some army cots for these steerage passengers. I can get you at least 200 good hard working members who pay you a dollar per night for a army cot and a blanket. You can keep all of that money if you only give me the con-

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Ready for
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Rooted cuttings from
2½-inch pots.

Potted summer 1940.

	Per 10	Per 100
Ilex crenata bullata	\$1.10	\$10.00
Juniperus hibernica	1.10	10.00
Juniperus Sabina	1.10	10.00
Retinispore filifera aurea	1.10	10.00
Taxus media Hicksl	1.10	10.00
Thuja occ. compacta	1.10	10.00
Thuja occ. globosa	1.10	10.00
Thuja occ. nigra	1.10	10.00
Thuja occ. Vervaeaneana	1.10	10.00
Thuja occ. pyramidalis	1.10	10.00

Well established grafts
from 2½-inch pots.

	Per 10	Per 100
Acer palmatum atropurpureum Novum	\$3.00	\$25.00
Chamaecyparis obtusa gracilis nana compacta	3.00	25.00
Fagus sylvatica pendula	3.00	25.00
Fagus sylvatica Riversii	3.00	25.00
Ilex opaca femina	2.75	25.00
Ilex opaca Howardii	2.75	25.00
Juniperus communis glauca	2.75	25.00
Juniperus communis viridis	2.75	25.00
Juniperus chinensis neaborensis	2.75	25.00
Juniperus chinensis Sargentii	2.75	25.00
Juniperus chinensis Sargentii glauca	2.75	25.00
Juniperus squamata	2.75	25.00
Juniperus squamata argentea variegata	2.75	25.00
Juniperus squamata Meyeri	2.75	25.00
Juniperus virginiana Burkii	2.75	25.00
Juniperus virginiana Canariensis	2.75	25.00
Juniperus virginiana elegantissima	2.75	25.00
Juniperus virginiana glauca	2.75	25.00
Juniperus virginiana globosa	2.75	25.00
Juniperus virginiana Keteleeri	2.75	25.00
Juniperus virginiana Kosteri	2.75	25.00
Juniperus virginiana Schottii	2.75	25.00
Juniperus virginiana pendula	2.75	25.00
Juniperus virginiana pyramidiformis	2.75	25.00
Juniperus virginiana pyramidalis	2.75	25.00
Juniperus sabina Von Ehren	2.75	25.00
Thuja orientalis aurea nana	2.00	18.00
Thuja orientalis conspicua	2.00	18.00
Thuja orientalis elegans	2.00	18.00

HESS' NURSERIES

P. O. Box 52

Mountain View, New Jersey

cession on the hamburger and coffee stand right there in the hold. I can work my way in nice shape on the steerage cafeteria. After all, some of our best people come over in the steerage.

I been reading in your circular how you think you can get by with putting the members in easy chairs and just sit there on deck looking at the water, or else to dance in the ballroom. You cant satisfy the boys with that. They want action. The chances are you will need a dozen pairs of boxing gloves so they can have a work out before breakfast every morning, and dont forget plenty of grits and fried salt pork for our members from the south. They wont go for the damned yankee food. But as I was saying, you will need a referee for the boxing matches, so I could help out there at so much per bout.

There is a rumor going around about a cribbage tournament between the Minnesota Wildcats and the Iowa Polecats. That will need a lot of umpiring. And who is going to settle the arguments when one of the Wildcats pulls a foul on one of the Polecats? Its got to be somebody up on the rules, and who have you got in your staff that can qualify? If you inquire around you will find that Chas. Chestnut is the only man for that delicate job.

Or if you let me bring on my own dice and no questions asked, I will give you a cut on that if you let me operate exclusive. Its got to be exclusive on that or I dont do business. Or if that concession is already let, could I have the blackjack concession? I got a good system on that which takes it off the boys like taking candy from the baby. Gosh, Mr. McGuire, there must be something I could get in on!

As a last resort, I would even take a job as the "captain of the head." This is only in case you cant use any of my other ideas. I was captain of the head one time for three months on a warship on account of a little misunderstanding with the chief boatswain mate, and I could keep things in good order in that department. Dont jump at this, however, but keep that in reserve for a last resort only.

If I wanted to be underhanded in my campaign, I could probably slip in as a stowaway. I could come

aboard disguised as a bag of potatoes or a side of beef. What could you do then? According to the laws of the high sea you couldn't throw me over the side, and you would have to let me ride for the rest of the trip, so you are liable to have me there anyway, so you might just as well figure out some kind of work so you could get the most benefit out of it.

Probably you will want to have references, if so I can give you the names of two of the members that you can write to. You can write to Henry Elderberry, he knows me, and you can also write to John Bushbottom. However, if it should be that John brings up a incident that happened at a convention three years ago where me and John had a little run in, you can discount that part as John was a little prejudiced in that instance.

I sure would like to go on your boat Mr. McGuire. I wish you would take it up with the board of directors and let me know how you come out. You can address me as follows: Charlie Chestnut, c/o Riverbend Nursery, Riverbend, Illinois.

MASSACHUSETTS ON AIR.

Cornelius P. Van Tol, of the Cape Cod Nurseries, Falmouth, Mass., will talk on "Summer Planting," June 13, on the nurserymen's radio program over station WBZ-WBZA.

"Azaleas for New England Gardens," was the topic of Harold S. Tiffany, of the Waltham field station,

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<i>Abelia Grandiflora</i>	\$6.50
<i>Buddleia Dubonnet</i> , wine-red	6.00
<i>Buddleia Charming</i> , fine pink	9.00
<i>Buddleia</i> , new, new blue	9.00
<i>Buddleia Hartwaxi</i> , lavender	8.00
<i>Buddleia</i> He de France, purple	6.00
<i>Buddleia Magnifica Imp.</i> , violet	6.00
<i>Almond</i> , pink-flowering or white	6.00
<i>English Ivy</i> , hardy type	4.50
<i>Kerria</i> , double yellow	6.00
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Dr. Van Fleet, Paul's Scarlet, Am. Beauty, Silver Moon, Dr. Huey, Excelsa, Emily Gray, Hiawatha.	
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A complete line of well grown hardy plant material
Evergreens and Lining-out Stock

Massachusetts State College, May 9.

These talks have been so worthwhile that C. E. Eshbach, director of the New England radio news service, United States Department of Agriculture, has extended the opportunity of continuing them through December of this year. The following program has just been completed and submitted by the Massachusetts Nurserymen's Association to Mr. Eshbach:

July—Kirkland Corliss, Corliss Bros., Gloucester, "Perennial Bloom for July and August."

August—Theodore F. Borsch, Little Tree Farms, Framingham, "August Flowering Shrubs."

September—William N. Craig, Weymouth, "Spring-flowering Bulbs Are Available."

October—Richard Wyman, Wyman's Framingham Nursery, Framingham, "Fruiting Trees and Shrubs for Birds and Color."

November—Lester W. Needham, J. W. Adams Nursery, Springfield, "Trees and Shrubs for Winter Effects."

December—Edward Mezzitt, Weston Nursery, Weston, "Christmas Greens."

GEORGE S. HARRIS, of C. R. Burr & Co., Inc., Manchester, Conn., lost his wife May 15. The funeral, May 17, was attended by many friends in the nursery trade.

THE thirty-third annual lilac Sunday, May 18, at Highland park, Rochester, N. Y., brought a record-breaking crowd to see the blooms. At least 100,000 visitors was the estimate of Patrick J. Slavin, city parks commissioner.

1866

1941

75 EVENTFUL YEARS

Established in 1866 . . . this year being our seventy-fifth finds us still in our original location . . . having survived throughout the years Wars, Depressions, Prosperity, Taxes, Republicans, Democrats, Prohibition and the Weather.

We now begin the seventy-sixth; still resolute in our convictions that Mankind should live at Peace, America be Free and Independent and that we as Nurserymen have a definite assignment to make America more Abundant and Fruitful.

NAPERVILLE NURSERIES
NAPERVILLE ILLINOIS



OBITUARY.

Elizabeth Anne Falt.

Elizabeth Anne Falt, the 13-month-old daughter of Mr. and Mrs. Joseph B. Falt, of the Chase Nursery Co., Chase, Ala., was fatally injured in a tragic accident in their apartment, in Huntsville, May 21. She was playing in her room during the noon hour, and in some fashion her neck became entangled in the cord which raises and lowers the Venetian blinds in the apartment. She apparently fell and was strangled almost immediately. The maid and Mrs. Falt took the baby's lunch in to her in just a few minutes and found the child sitting on a basket of toys with the cord around her neck. Immediate aid was summoned, artificial respiration and oxygen were supplied, but it was in vain.

Funeral services were held Thursday afternoon, May 22.

Joseph B. Falt had completed a trip through the south in behalf of the Chase Nursery Co., Chase, Ala., shortly before. Mrs. Falt and he have deepest sympathy from numerous friends in the trade.

Rebecca M. Jones.

Miss Rebecca M. Jones, known to many of the older nurserymen as secretary to the late Thomas B. Meehan, died suddenly Tuesday afternoon, May 20.

She had been in the employ of the Meehan nurseries nearly forty-five years, having entered our service in the days of Thomas Meehan, and lately had the pleasure of seeing the fourth generation of Meehans enter the business.

Miss Jones had not retired, but had been at the office until within one hour of her death.

This was her record of faithful service.

Albert F. Meehan,
Dresher, Pa.

Edward E. Spence.

Edward E. Spence, for several years manager of the Beverly Hills Nursery and superintendent of the Rodeo Land & Water Co., died last month at Beverly Hills, Cal. He was active in organizing the Southern California Horticultural Institute and had been mayor of Beverly Hills for eight years.

LINING-OUT STOCK

All plants listed are well rooted potted plants ready for field planting.

		100 rate	1000 rate
Juniperus chinensis	Pfitzeriana, 4 to 6 ins.....	\$0.10	\$0.08
Juniperus chinensis	Pfitzeriana, 6 to 8 ins.....	.12	.10
Juniperus chinensis	Pfitzeriana, 8 to 10 ins.....	.14	.12
Juniperus Sabina	4 to 6 ins.....	.09	.07
Juniperus Sabina	6 to 8 ins.....	.12	.10
Juniperus Sabina Von Ehrn	6 to 8 ins.....	.10	.08
Juniperus Sabina Von Ehrn	8 to 10 ins.....	.12	.10
Juniperus virginiana	Kosteri, 8 to 10 ins.....	.12	.10
Juniperus virginiana	Keteleeri, 8 to 10 ins.....	.16	.14
Juniperus virginiana	tripartita, 10 to 12 ins.....	.15	.12
Juniperus communis	hibernica, 6 to 8 ins.....	.10	.08
Juniperus chinensis	Pfitzeriana		
Aurea (Hill's Golden Pfitzer)	, 4 to 6 ins.....	.12	.10
Juniperus chinensis	Pfitzeriana		
Compacta, 4 to 6 ins.....		.12	.10
Juniperus scopulorum	Chandler		
Silver, grafts, 8 to 12 ins.....		.25	.22½
Juniperus scopulorum	Kenyoni*,		
Dewdrop Juniper, grafts, 8 to 12 ins.....		.50	.40
Juniperus scopulorum	Kenyoni*,		
1-year lath house grown, grafts, 12 to 15 ins.....		.85	.75
*See April 1 issue of American Nurseryman for description.			
Lonicera Heckrottii, gold and flame colored honeysuckle, 8 to 12 ins.....		.08	.06
Teucrium Chamaedrys, 4 to 6 ins.....		.08	.06
25 at 100 rate, 250 at 1000 rate.			

KENYONS NURSERY

10th & May Avenue

Oklahoma City, Oklahoma

LINING-OUT STOCK

Tsuga canadensis, Abies balsamea, Picea rubra, Pinus Strobus, Acer rubrum and saccharum; Betula lenta, lutea, papyrifera and populifolia; Fagus americana, Fraxinus americana, Prunus pennsylvanica and serotina and many other trees and shrubs.

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P. O. Box 147, Exeter, N. H.

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Manchester, Conn.

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Larvacide,

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gate Potting and Seed Flat Soil right in bins, deep
frames and compost piles. Controls most weed
seeds, nematodes and fungi that cause damping-
off. Write

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Specimens in U. S. 10 inches to 6 feet.

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Mrs. R. P. Royer High Point, N. C.

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Perennials

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This Business of Ours

Reflections on the Progress and Problems of Nurserymen

By Ernest Hemming

COLOR EFFECT.

The other day I saw a color effect so pleasing that it started me wondering why one didn't meet with it more often, especially as the plants are among those most frequently planted. The color effect in question was a base planting about a porch and was produced by Spiraea Vanhouttei in the back row with Berberis Thunbergii atropurpurea in the foreground. The tops mingled and produced an unusually pleasing effect while the spiraea was in flower, and the effect would not be too bad even during the balance of the year.

THE EXPERTS DON'T KNOW IT ALL.

Bulbs, such as daffodils and tulips, should be planted where they can remain until the tops are dead and the bulbs thoroughly ripened. This is necessary to enable the plant to restore the food in the bulb so that it can produce a bloom the following year.

I wrote the above about twelve hours ago believing every word of it. This belief was based on empirical knowledge gained by practical experience during fifty years of gardening.

Since writing it, I called on a neighbor, who had a bed of superb mixed May-flowering tulips. Knowing tulips were rather scarce last fall, I remarked, "You must have blowed yourself or is your hobby now tulips instead of dahlias?" The neighbor in question has quite a local reputation as an amateur dahlia grower. His reply was, "Oh! no! I have had those tulips for quite a number of years. I dig them up as soon as they are done flowering, put them in a peach basket and store them in the cellar, so as to be able to get the ground ready to plant my dahlias." The tulips in question, while perhaps not quite so good as imported bulbs, were decidedly better than my own, which had been left in the ground for a second year. The only explanation as to why the tulips have done so well under such treatment is

that the ground is exceptionally well fertilized with bone meal, sheep manure and shredded cow manure to grow show dahlias. But this does not answer all the questions. E. H.

GULLIBILITY.

It is often amazing to the nurseryman, who has spent a good part of his life in studying, growing and handling plants, to find that the word of the rank amateur about them is often taken in preference to his own, and the extraordinary ideas many people have about plants.

A man comes to the nursery and tells us he is thinking of planting a row of trees along his driveway, asking what kind of tree would we recommend, as a good number of trees will be required. We suggest that we call and look over the situation so that we can give the best advice possible. After seeing the location we decide the red maple, Acer rubrum, is the most promising kind to use. We advise accordingly, the order is duly given, and the trees are planted. The following summer, much to our surprise, the customer

writes us he is much dissatisfied with the trees we planted for him. He says he has been told they were a trashy kind, and no amount of explanation as to the different kinds of maples seems to reassure him. He doubtless prefers to take the word of someone whose knowledge of maples is limited to one kind.

There seems to be a parallel in the practice of medicine, or there would not be such a ready sale for quack remedies.

Perhaps it is human nature, because we are believers instead of thinkers. We are all too mentally lazy to do even our own superficial thinking. The one that promises most gets the cookie.

It is not unknown that a nurseryman's catalogue will list all the good qualities of a plant or tree and even exaggerate them a little, but is silent on its less desirable qualities.

Maybe this is permissible with manufactured goods, which are a finished product and at their best when sold. The purchaser usually has a good idea what he is getting.

But with nursery stock the value is largely potential and has to be bought on faith. For this reason alone the ancient rule, "Let the buyer beware," should not apply. Rather, the opposite is true, and it is the rule rather than the exception for the nurseryman to give the best advice possible to ensure the purchaser's getting his money's worth.

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HOLTON & HUNKEL CO.

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NORTHERN COLLECTED EVERGREENS

See advertisement in April 15 issue.
List on request.

William Crosby Horsford

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For Seventy-seven Years
Growers of Quality Evergreens
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North Muskegon, Mich.

**THUJA OCCIDENTALIS
FASTIGIATA.**

Thuja occidentalis fastigiata (pyramidalis), the pyramidal arbor-vitæ, is one of the most common and useful arbor-vitæs. At maturity it may reach twenty to twenty-five feet or more, becoming a dense, columnar form with short branches. With some trimming it is not much wider at the base than at the top. The foliage is dark green.

Its cultural requirements consist of a good soil, retentive of moisture, and its use in sun or partial shade. Ample moisture is essential, and plants should not be crowded. Two of its most serious faults are its tendency to form secondary leaders and the browning and dropping of foliage in the fall. Secondary leaders can be readily avoided by judicious pruning in the nursery and later in the landscape plantings. This matter should not be overlooked, since the secondary leaders allow for considerable pulling apart in heavy snow and ice storms and an irregular, unattractive growth habit.

The browning and dropping of the foliage in the fall is not unusual with arbor-vitæs, especially following hot, dry summers. This unsightliness can be partially avoided by supplying the plants with ample moisture during the summer and shaking the brown, dead foliage out of the plants as it appears. It is subject to attacks of bagworm and red spider, as is true of most arbor-vitæs.

Propagation is by cuttings taken during early winter, late summer or spring. When taken in early winter they are handled in greenhouses; otherwise in hotbeds or coldframes. Grafting is occasionally practiced to speed production.

Thuja occidentalis fastigiata may be used in formal plantings and, for a rapid-growing, tall but narrow screen, it has few if any equals among hardy evergreens. L. C. C.

THE first examination for those persons who wish to use the title of certified tree expert in New Jersey was held May 28 by the tree expert bureau, composed of Carl Bannwart, Winston Parker and Nelson T. Kessler, in the offices of the department of conservation and development, at Trenton.

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Large Hard Maple
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NORTHERN-GROWN NURSERY STOCK
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Vines. Write for price list.

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Send Want List for Quotations
One of America's Foremost Nurseries
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SHENANDOAH, IOWA

Diseases of Trees

Gleanings from the Latest Reports of Scientific Research

By Leo R. Tebon

NEMATODE ATTACKS PEACH.

An unusual but enlightening report on the failure of young peach trees to make satisfactory growth after being transplanted into an orchard comes from John O. Miller, of the Kansas state college of agriculture staff. Young trees five-sixteenths of an inch in diameter when planted March 15, 1938, had grown poorly during the seasons of 1938 and 1939. Upon examination of the stunted trees, their roots were found to be involved with numerous knots or galls, and from these galls a nematode identified technically as *Heterodera marioni* was obtained.

Nematodes are animals, more or less wormlike in shape and, according to kind, of considerable variation in size. The majority of them are microscopically minute, harmless inhabitants of the soil, but some, adapted to a parasitic life, invade man, animals and plants, causing such familiar maladies as hookworm disease, trichinosis and the eelworm disease of greenhouse crops. One of the plants most commonly attacked by them is the tomato.

The history of the orchard mentioned above was this: Previous to 1932 the ground had been planted to truck and vegetable crops, from the spring of 1932 to that of 1937 to blackberries, in 1937 again to vegetables. After the young peach trees were set in the spring of 1938, tomatoes and other vegetables were grown between the rows.

A second orchard, near by, which had been planted at the same time with trees from the same nursery, of the same variety and of the same size, had grown normally. Here, prior to the planting of the peach trees, the ground had been used only for the production of grain crops and alfalfa and, after planting, had first been clean cultivated and, in the second season, drilled to wheat as a cover crop.

In Kansas, as elsewhere, tomatoes, garden beans, eggplant and other

vegetables are susceptible to attack by nematodes and presumably serve to introduce and multiply them in the soil. That soils recently used for vegetable production should not be chosen as planting sites for nematode-susceptible nursery stock seems to be the obvious moral of the above experience, but it carries also the suggestion that the failure of good nursery stock to do well after being transplanted can be due to unusual causes related to the planting site.

CROWN GALL CAN INFEST SOIL FOR FORTY YEARS.

In certain parts of the United States the production of nursery stock of peach, plum and other stone fruits meets a serious hazard from infection by crown gall. This disease, caused by a bacterium known as *Phytomonas tumefaciens*, causes the development of large, irregular galls on the roots and at the crown of the plant. It is familiar to most nurserymen, since it attacks a wide range of plant species.

Among the many ways in which crown gall infection can occur, an

important one is the infection of young stock by bacteria present in the soil. To avoid such a possibility, attempts have been made to develop soil treatments and preplanting treatments for peach pits (see the American Nurseryman for July 15 and October 15, 1940), while generally the practice of rotation, so that stands of susceptible species will not succeed themselves on the same plot of ground, has been advised as a partial solution of the problem.

In connection with the rotation of plantings the question often arises as to just how long a period of time must be allowed to elapse before peaches or other equally susceptible trees can again be safely set on a given plot of soil. An observation by L. C. Cochran, of the California citrus experiment station, Riverside, Cal., suggests that in his region planting must always be done in new soil and never in soil that has been used once for species of prunus. The observation referred to seems to prove that the crown gall bacterium can exist in dangerously great numbers through a period of forty years in land devoted during those years to grains, which are not susceptible to attack and might be expected to discourage persistence of the germ in the soil.

The observation reported by Cochran relates to an experimental plot of seedling and transplanted nursery trees of peach, Myrobalan plum,

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apricot, almond and cherry set out in 1938 and 1939 on land which had been alternately summer fallowed and cropped to grain, upon which no orchard trees had been grown since 1898, and which was so situated that infection of the soil with crown gall bacteria by drainage from surrounding orchards seemed impossible. Clearly, however, from subsequent results, the land must have been planted to a crown gall susceptible species prior to 1898.

When, in 1940, some of the prunus seedlings planted during the previous two years were dug for discard, it was discovered that they were severely diseased with crown gall. Further examinations revealed that between ninety-five and one hundred per cent of all the trees in the plot had become infected. Seedlings had galls ranging from one-half to six or more inches in diameter at the point where the cotyledons had been attached, and transplanted trees had developed galls on the ends of roots which had been cut when the trees were dug in the nursery. Also, galls were common at the forks of smaller roots on both seedlings and transplants, indicating that infection had occurred as new lateral roots arose.

Giving consideration to all possible factors, Cochran concludes: "There is little reason for doubt that the trees became infected from the soil of the plot. Since there are no crops present from which the crown gall organism could spread, it must have existed in the soil since previous hosts were removed. The rather definite history of the land establishes this period at about forty years."

With such evidence of the possible longevity of crown gall bacteria in soils, it seems quite desirable to take advantage of the newly suggested procedures for crown gall control. This would involve, first, the selection of a planting plot having acid soil and, if possible, one on which crown gall susceptible species had never been grown; second, preplanting treatment of peach pits (and probably also of all other similar seeds) with calomel as directed by Siegler and Bowman in the October 15, 1940, issue of the American Nurseyman, and third, the avoidance of the use of lime as a soil application where crown gall susceptible crops are growing or are apt to be grown.

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CALIFORNIA MEETINGS.

The next meeting of the Central California Nurserymen's Association will be held June 17 at Irvington, and Clarence Perkins will be in charge of arrangements, reports John McDonnell, secretary. The organization meets on the second Thursday of each month. May 8, at the Claremont hotel, Berkeley, Ned Rucker gave an interesting talk on plant materials from the landscape designer's point of view. Paul Ducher announced an open forum on plant material to be held June 2 at the Montgomery theater, San Jose.

The Superior California Nurserymen's Association met at Sacramento May 7, when Frank Tuttle, director at large of the California Association of Nurserymen, told of the activities of the state organization. Because it is just starting its second year, the association reelected all its officers, as follows: President, Louis B. Lagomarsino, of F. Lagomarsino & Sons, Sacramento; vice-president, Ray Stuart, of Stuart Nurseries, French Camp; directors, Fred Wittsche, East Lawn Nursery, Sacramento, and Hubert Geisreiter, Bell Conservatory, Sacramento, and secretary-treasurer, Charles G. Armstrong, Capital Nursery, Sacramento. It is planned to have an early meeting at Modesto for a joint gathering of the San Joaquin, Central California and Superior California associations, all chapters of the California Association of Nurserymen, of which the secretary is Gordon Wallace, 2205 The Alameda, San Jose.

The new officers of the San Fernando Valley Nurserymen's Association were reported in the May 15 issue.

The Southern California Horticultural Institute held its May meeting at the Mayfair hotel, Los Angeles. Elizabeth Bodger showed some new colored pictures and spoke interestingly on "The Romance of Flowers." Before the dinner, members of the women's auxiliary met to complete their plans for flower arrangement competitions at the forthcoming flower and garden show, June 6 to 15, at the Pan-Pacific Auditorium, Los Angeles. Mrs. Chester Swift is chairman of the auxiliary. The group has undertaken as its initial project for the institute to raise funds for the printing of its yearbook.

The nurserymen's division of the

Southern California Horticultural Institute enjoyed a social jamboree in connection with its monthly meeting, May 22, at Taix French restaurant, Los Angeles. Birthday anniversaries were celebrated by A. V. Wagner and H. F. Armer. J. C. Watt, president of the California Association of Nurserymen, and other members were at Sacramento recently to discuss the Foley bill with the state Grange and reported agreement on numerous changes. The bill is now being worked over by Frank Tuttle, Ray Hartman and the association attorney, Mr. Cottrell, and it is expected that many of the features objectionable to nurserymen will be removed from this bill, introduced by the Grange and affecting all nurserymen selling fruit trees or berry plants.

WASHINGTON NOTES.

The Western Plant Board will meet June 26 at Salt Lake City. The western standardization committee meeting immediately follows.

A shipment of 400 rhododendrons from England was received in Seattle recently. Seventy per cent of the shipment was in perfect shape, the remainder doubtful because of improper packing.

Officials of more than forty automobile caravans planned the trips to the Olympic peninsula and other parts of the state, May 25, for the best views of rhododendrons, which are now blooming in profusion.

Governor Langlie designated May 23 and 24 as rhododendron days and urged residents of the state and their friends to participate in the rhododendron festival at Port Townsend.

An early spring has brought the wild flowers of the Olympic peninsula to their best, and those who visit this territory within the next few weeks will see the rhododendrons, the Washington state flower, blooming in great profusion.

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A group of agriculturists from eastern Canada will settle in the northern portion of Vancouver island in the fall with a view to growing tulip bulbs to supply requirements of the Dominion, stated Prof. W. G. Evans, of the Ontario agricultural college.

Sattree & Gorund, Seattle gardeners, will landscape the Yessler Hill housing project, amounting to \$45,000.

C. P. Malmo Nursery will landscape the grounds of the Boeing Aircraft Co. at Seattle.

W. L. Fulmer.

TREADWELL EXPANDS.

W. M. Treadwell, owner of the Treadwell Nursery, Great Falls, Mont., recently purchased a tract of land adjoining the city. The soil is a rich clay loam. Water for irrigation is supplied from Sun river by a centrifugal electric pump. During the past winter a large lath house and storage shed have been constructed. This spring several thousand evergreens and deciduous trees and shrubs have been planted.

Mr. Treadwell is the pioneer rose enthusiast of the region. Before he entered the nursery business, it was thought impractical to grow roses in Montana and the adjoining states. Mr. Treadwell experimented several years and evolved a method whereby roses can be grown there as successfully as in most other states.



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DOGWOOD WINTER INJURY.

The early part of May it became evident that there were an unusually large number of dead branches on flowering dogwoods and that here and there good-size trees were killed back nearly to the ground in eastern states. Earlier developments with rhododendrons and the narrow-leaved evergreens suggested that the dogwoods likewise had suffered from late winter and early spring drying. The situation was further complicated by bleeding or exudation of sap from the living portions of dogwood branches just below the dried parts. It looked much as though some new disease had developed, and yet culturing by an expert failed to reveal any evidence of dangerous infection, states Dr. E. Porter Felt, of the Bartlett tree research laboratories, Stamford, Conn. Later, a few dogwoods were located which showed excessive bleeding from mid-winter cuts which ordinarily would not produce an excessive sap flow.

The more reasonable explanation of this unusual bleeding, he says, is probably that the roots of the dogwood escaped with little or no injury and that with the coming of spring the normal flow of sap resulted in such great pressure in the much-restricted living wood remaining that there was cracking of the bark, sap flow or exudation from the cuts, since the dogwood is a well known bleeding tree. It is purely a physiological problem. There is no indication of disease so far as this particular condition is concerned. Here, as in the case of other winter-injured trees and shrubs, the trouble was largely proportional to the vigor of the tree and the deviation from normal growing conditions so frequently seen in trees growing on lawns.

NURSERY stock worth more than \$1,500 was destroyed May 6 on the property owned by William Bytzko, Hillside, N. J.; 618 small apple trees and a valuable magnolia tree were hacked down.

THE Boulevard Nurseries, Newport, R. I., have been awarded the contract for planting and landscaping Easton's beach, in that city. The contract calls for setting out several thousand plants at the entrances and seeding down plots around the parking grounds.

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TEXAS NURSERYMAN WINS CROWN GALL SUIT.

J. Lloyd Browning, traveling auditor for the Texas comptroller, failed to recover damages for complaint against Ross R. Wolfe, Stephenville, Tex., in a damage suit in Eastland county, where 2,400 peach trees had been planted from Wolfe's Nursery.

The trees were planted in March, 1937, and while no galls were on the roots at the time of planting, in December, 1938, Browning found forty or fifty per cent infected trees. Suit was filed for \$18,536. Four law firms and twenty-five witnesses were used in the trial of the case in the Ninety-first District court, which lasted one week.

Dr. Harris, dean of Texas Teachers College, Denton, testified it was his opinion the bacteria of crown gall could not live in the soil longer than two and one-half years without a host plant present. A. A. Dunlap, plant pathologist, Texas A. & M. College, also testified for the plaintiff, and said it was his opinion that the land in question, having been in cultivation for fifty years, would not be infected with crown gall; also, that in his opinion the trees were infected before they were set in the soil.

C. C. Mayhew, nurseryman, Sherman, Tex., testified that he had always found crown gall in all soils which had previously grown trees regardless of how long it had been in cultivation. R. B. Alexander, orchardist and nurseryman, Weatherford, Tex., also testified for the defendant and concurred with Mr. Mayhew that crown gall might be expected in all peach orchards in the cross timbers.

Walter McKay, Texas chief nursery and orchard inspector, testified about three million peach trees had been removed in Texas for the purpose of cleaning up old orchards and that about fifty per cent of the trees, to his knowledge, had crown gall at the time of removal.

Facts brought out in the trial were:

1. Crown gall is a bacterial disease attacking plants and trees both below and above the ground.
2. It enters plants most readily through cut roots or broken places in the bark or root coverings.
3. Crown gall may be transmitted by tools and water in the soil, but rarely by wind.
4. Crown gall is native to oaks and other forest trees.

5. Crown gall attacks peaches, apples, blackberries, cherries, willows, poplars, roses and, in slight degrees, other nursery plants.
6. Changing land with nursery stock helps keep down bad infection in the nursery.
7. Crown gall is more prevalent in alkaline soils than in acid soils.
8. Transplanted trees are more likely to have crown gall (if roots are not dipped in disinfectant) than trees that are not transplanted.
9. Trees well cared for will more likely outgrow the effects of crown gall than trees that are neglected.

The Texas experiment station at A. & M. College has been asked to study the disease further under Texas soil conditions and the findings should be valuable to Texas orchardists and nurserymen.

While the verdict of the jury in the above case was completely in favor of the nurseryman, holding that the nurseryman is not to be held responsible for any disease which shows up after the trees are planted, yet nurserymen are deeply interested in learning more about the disease and any measures that may help in reducing crown gall both in the nursery and orchard. Notice of appeal was given; so this case may go to the higher courts. Texas nurserymen have manifested a wide interest in the case and many of them are contributing the benefit of their experience in dealing with the disease.

RELAX FRUIT MOTH BAN.

The Oriental fruit moth quarantine which California, Oregon and Washington have maintained for some time against a number of other states has been relaxed by a recent amendment.

The amendment provides for the entry of bare-rooted trees or plants of peach, nectarine, almond, apricot, plum, cherry, chokecherry, quince, pear and apple, grown or shipped from the infested territory, provided the trees or plants have been fumigated in an approved fumigation chamber by an approved fumigation method, such as methyl bromide gas, during the dormant period, November 1 to April 1, and then held in and shipped from approved storage.

Among the states against which the Oriental fruit moth quarantine of the three Pacific coast states operates are Alabama, Arkansas, Georgia, Kansas, Louisiana, Mississippi, Missouri, North Carolina, South Carolina, Tennessee and Texas.

There still remains effective a California quarantine against Texas and some other states on account of peach mosaic disease.

TEXAS PRISON NURSERY.

Members of the Texas Association of Nurserymen rallied to defeat the proposal of a prison nursery, reports Secretary Harvey Mosty, who quotes from a letter of J. M. Ramsey, chairman of the legislative committee, as follows:

"With reference to the item for the horticulturist at the prison system, the situation is this:

"This item remained in the appropriation bill passed by the senate, but was stricken out in the house. We anticipate that it will not be reinstated by the conference committee between both houses. It is necessary now to see that the item is not reinstated in the conference committee.

"It seems that at least a fair number of nurserymen have written to

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their senators and representatives, and I think the effect has been satisfactory. It has always been pleasing to find our legislators want to do the right and fair thing."

SOUTHWESTERN NEWS.

Perry Lambert, Hiawatha, Kan., was low bidder on two roadside improvement projects in Brown and Nemaha counties.

Carl Holman, proprietor of the Leavenworth Nurseries, Leavenworth, Kan., has built a 50x60-foot storage house of stone. Besides storage room there are a retail salesroom and an office. Mr. Holman cut and stored 75,000 peonies for Memorial day.

The Lawson Landscape Service, McPherson, Kan., has been awarded the contract for roadside improvement work in McPherson and Saline counties.

The Williams & Harvey Nurseries, Mission, Kan., are converting a 13-acre tract just outside Kansas City, Kan., into a residential subdivision. There are already utilities and pavement on the land, which is on Mission road at about Fifty-ninth street.

The Sutton Nursery, Independence, Kan., has the contract for an extensive roadside job in Montgomery county.

The greenhouse belonging to Clio Smith, Moline, Kan., formerly doing business as Clio and Ella, is now called the Moline Greenhouse.

J. Frank Sneed, proprietor of the Sneed Nursery Co., Oklahoma City, Okla., a member of the executive committee of the American Association of Nurserymen, went through Kansas, Missouri and Oklahoma recently, calling on brother nurserymen.

NEW PLANT PATENT.

The following plant patent was issued May 20, according to Rummler, Rummler & Davis, Chicago patent lawyers:

No. 466. Rose plant. John deVink, Boskoop, Netherlands, assignor to the Conard-Pyle Co., West Grove, Pa. A new and distinct variety of rose plant of the indica mimina species, characterized as to novelty by symmetrical habit of growth and diminutive size, its fernlike narrow-pointed leaves and the perfect form and novel color of the flowers.

THE Atwood Nursery Co. has been opened at Atwood, Ill., by Oscar Lundstrom.



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Goodrich
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BUDDING STRIPS

BROAD-LEAVED EVERGREENS.

[Continued from page 12.]

tively tender for our territory and some of the named varieties seem superior. It is said to be satisfactory in some parts of the south.

Ilex cornuta, the Chinese holly, and its variety *burfordi* are placed on the secondary list. Both the species and the variety may reach a height of fifteen feet at maturity, but their average size probably brings them within the upper limits of this size group. *Ilex cornuta*, a native of east China, is an upright-spreading shrub or small tree with glossy green leaves having three spines at the broad apex. The fruits are red, and it is listed as being hardy in zone 7.

Ilex cornuta burfordi is similar in habit of growth and foliage except that the leaves are entire or with one pair of spiny teeth near the apex. The red fruits are exceptionally large. At least some, if not all, the flowers on our plants are bisexual, as single plants in the greenhouse have set fruit. One authority states that the variety is hardier than the species and is one of the outstanding hollies for planting from Philadelphia south. It surely deserves further trial.

Kalmia latifolia, mountain laurel, is among the most difficult plants to classify as to size group. In its native haunts it may reach a height of from thirty to forty feet at maturity. Few plants are above ten feet in height, and possibly more plants in landscape compositions are below six feet than above this height. Regardless of the exact group classification, it is undoubtedly one of the best broad-leaved evergreens. It is native to the territory from Quebec and New Brunswick south to Florida and west to Ohio and Tennessee. It is a relatively slow-growing, bushy plant with dark green foliage and an abundance of white and pink flowers in May and June. In flower it is one of the most beautiful flowering plants. It is cold hardy, but in fully exposed situations may be subject to some wind burn. It endures adverse climate and soil conditions better than most rhododendrons, and during the coldest weather the leaves do not roll and droop as they do with the rhododendrons.

The mountain laurel requires an acid soil that is well drained and one containing a liberal quantity of organic matter. These conditions are similar for all ericaceous plants. A

soil retentive of moisture is desirable. While it will stand sun or shade in most situations, partial shade is the ideal location. It is useful as specimen, border, bed or foundation plants.

Three varieties of the mountain laurel are included on the secondary list. These are *alba*, with white flowers; *fuscata*, a variety with the corolla marked with a dark purplish-brown band, and *rubra*, with deep pink flowers. These varieties are not generally available.

Pyracantha coccinea lalandi, Laland firethorn, is a vigorous-growing shrub from eight to ten feet or more in height having slender branches bearing dark green leaves and bright orange-red fruits remaining on the plant well into the winter. Its habit of growth is quite upright. The leaves are an inch to an inch and one-half long and deeply crenate. White flowers are attractive in May or early June. It is one of our most attractive broad-leaved evergreens in fruit.

The chief objections raised to this plant are its susceptibility to scale and fire blight and that it transplants with difficulty. These faults are more than counterbalanced by its good points. Scale can be controlled by regular spraying, but blight is difficult to control. Spraying the flowers when in bloom, cutting out the blighted branches well below the infected area and cleaning and painting the cankered areas are preventive and control measures recommended. It has

been observed that the Laland firethorn does not blight so severely in the field as *Pyracantha coccinea pauciflora*. Pot-grown plants are readily moved.

It is hardy in zone 5 and prefers a well drained soil and a sunny location. It will tolerate semishade. It finds its use as a specimen or as a clipped screen or hedge and is at its best when trained against a wall, allowing the deep green foliage to act as a background for the berries. Espalier plants fruit especially well.

The species, *Pyracantha coccinea*, has been relegated to the discard list because of its more tender habit and its susceptibility to scale and blight. It is a more sprawling bush than the Laland variety. Espalier and trimmed pyramid forms are offered in the trade.

Pyracantha crenato-serrata is placed on the secondary list. This plant has been listed as *Pyracantha gibbsi*, *Pyracantha yunnanensis* and *Pyracantha crenulata yunnanensis*. *Pyracantha crenato-serrata* is now considered correct. It is a shrub to about ten feet in height, with rusty pubescent branches and usually entire leaves one to two inches in length. Its fruits are coral-red and are produced abundantly. It is listed as being hardy in zone 6 and deserves further use in protected locations in our territory and in the south where it is said to be especially good and more immune to fire blight and scale than other species and varieties discussed.

Rhododendron maximum, rosebay

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rhododendron, is native from Nova Scotia and Ontario south to Georgia, Alabama and Ohio. In its native habitat it may reach a height of from thirty-five to forty feet at maturity. In landscape plantings it is much smaller. The leaves are large and dark green. The flowers are rose to purplish-pink, produced in late June or July. The rosebay rhododendron can be distinguished from Rhododendron catawbiense by its large leaves which are tomentose or pubescent on the underside. The leaves of Rhododendron catawbiense are glabrous.

Cultural conditions suitable for the Catawba rhododendron and the hybrids were given in detail in the previous discussion. These suggestions apply equally well to Rhododendron maximum and its varieties. The plants are useful as specimens or border plants. They are perfectly hardy except for wind injury in situations subject to severe sweeping winds.

Rhododendron maximum has been placed on the secondary list because it was felt that the flower color of the varieties was more pleasing. Rhododendron maximum album has white flowers and Rhododendron maximum *purpureum* has deep pink to purple flowers.

A number of rhododendron species are placed on the secondary list. Some of these deserve more extensive trial; others seem to warrant no higher rating. Rhododendron cunninghami, a hybrid of Rhododendron maximum and arboreum, is hardy, develops a good bush and has attractive white flowers with dark purple spots. The leaves are brown tomentose beneath. The plant is quite satisfactory. Rhododendron decorum is a shrub to about twenty feet in height at maturity, with 2 to 6-inch leaves and white to pink

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flowers spotted greenish or pinkish. It is hardy in zone 5 but not common. Rhododendron discolor attains a height of about fifteen feet at maturity and has leaves four to eight inches long, dark green above and whitish beneath. Flowers are white to pale pink. It is listed as hardy in

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zone 6. It is not common. Rhododendron fargesii is a shrub to twenty feet in height at maturity with leaves

two to three inches long, dark green above and glaucous beneath. The flowers are white to deep rose. It is listed as hardy in zone 5. It also is not common.

Rhododendron fortunei attains a height of about twelve feet at maturity and has leaves four to eight inches long, light green above and glaucous beneath. The flowers are rosylilac to blush and quite fragrant. It is listed as being hardy in zone 6. It is not common.

Rhododendron keiskei is a shrub to ten feet in height, with leaves one and one-fourth to two and one-half inches in length, dark green above and scaly and lighter green beneath. The flowers are pale yellow. It is hardy in zone 5 but not common.

Rhododendron smirnowi is a large shrub to twenty feet in height at maturity, with white tomentose branchlets and leaves three to six inches long, dark green above and dense white woolly beneath. The flowers are rosy-red, produced abundantly and attractively. It is hardy in zone 4. It is resistant to attacks of the lace fly and worthy of more extensive use.

Some of the other plants on the secondary list should be mentioned at least briefly.

Berberis stenophylla deserves at least a secondary rating. It is a rather handsome shrub with slender arching branches and narrow dark green leaves somewhat less than an inch in length. Its flowers are golden-yellow and quite attractive when compared with other barberries. It is listed as being hardy in zone 5, but has been subject to winter

injury in our tests. Two barberries, *Berberis ilicifolia* and *pruinosa*, are placed on the discard list, because of their tender character.

Choisya ternata, the Mexican orange, is a rounded shrub about ten feet high with white fragrant flowers in spring. It is said to be hardy in zone 6 and probably should be given further trial. It is rare in our territory.

Euonymus japonica is an upright-spreading evergreen shrub which will reach from twenty to twenty-five feet or more in height at maturity, but usually is smaller in landscape plantings. It is hardy in zone 7; consequently it cannot be grown in our territory. It is quite common in the south, but is criticized because it is so subject to scale. The varieties *Euonymus japonica argenteo-variegata*, with leaves edged and marked white, and *Euonymus japonica pyramidata*, a variety of upright, compact columnar habit, are also placed on the secondary list for limited use in the south. Other variegated varieties, some of which may be nearly as good, are placed on the discard list. I see no reason why all of them should be grown, and choice will depend on the satisfaction of the particular variety in the territory in question.

Fatschedera lizei, a hybrid of *Hedera helix* and *Fatsia japonica*, has made its appearance in recent years, and while it is not fully hardy in the territory under consideration, it deserves further trial in protected situations and further south. It is an upright shrub about six to eight feet high at maturity with 3 to 5-lobed leaves. Flowers are produced in terminal panicles.

Ligustrum japonicum, the Japanese privet, and *Ligustrum sinense*, the Chinese privet, are evergreen species grown in the south and come within this size group. They are not hardy in our territory. *Ligustrum japonicum* is a shrub of about ten feet in height at maturity with dark, glossy green leaves, one and one-half to four inches long. The variety *Ligustrum japonicum rotundifolium* is more compact and of slower growth. It has been listed as variety *coriaceum*. *Ligustrum sinense* is a plant to about twelve to fifteen feet in height at maturity and has elliptic leaves, one and one-fourth to two

and three-fourths inches long. *Ligustrum lucidum*, the glossy privet, is much larger and is outside the limits of this size group.

Mahonia beali is grown more extensively in the upper south than it is in our territory where it is subject to sunscald and not particularly hardy. Plants develop to a height of more than ten feet at maturity, but are usually within or below the limits of this size group. The leaves are large, coriaceous, bluish-green above and glaucous beneath. The flowers are pale yellow. Fruits are bluish-black. If used in partially shaded situations it should be fairly satisfactory, but does not deserve higher than secondary rating in our territory. *Mahonia fremontii* and *pinnata* are less hardy and placed on the discard list. They are less common than *Mahonia beali*.

The osmanthus species are not sufficiently hardy in our territory to recommend, and for the most part they are larger than the limits of this size group. *Osmanthus fortunei*, together with *Osmanthus armatus* and *delavayi*, should be satisfactory in the upper south.

Phillyrea decora is a compact evergreen to about ten feet high, with large lance-shaped leaves and small white fragrant flowers. It is the

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hardiest of the genus, listed as hardy in zones 5 and 6 and deserves further trial. *Phillyrea angustifolia* is similar but said to be less handsome and not so hardy.

Three other genera on the secondary list are not sufficiently hardy in our territory to recommend, but they should be satisfactory plants in the south. *Photinia glabra* is an irregular globe shrub from ten to fifteen feet in height, with reddish young growth and attractive orange fruits in clusters. *Raphiolepis indica* has attractive foliage, creamy-white flowers and blue-black fruits. *Raphiolepis umbellata* is somewhat similar and handsome with its evergreen foliage and fragrant white flowers.

Stranvaesia davidiana and the variety *salicifolia* are placed on the discard list because of their tender character. *Stranvaesia davidiana undulata* is described as being hardy in zone 5 and deserves further trial. The plant is upright and spreading and has green leaves sometimes tinged with red, white flowers and small coral-red to orange fruits. It is attractive and should be used where hardy.

Viburnum rhytidophyllum, the leatherleaf viburnum, a native of central and western China, attains a height of ten feet or more at maturity, has upright branches and large, heavy lustrous dark green leaves. Its yellowish-white flowers and fruits, which are red at first but finally black, are quite effective. It is hardy in our territory, except in unusually cold winters, if used in protected situations. It makes a good specimen, bed or border plant. If the leatherleaf viburnum were harder, it would deserve rating in the selected group. Some of the broad-leaved evergreen viburnums of the south are not included, although they are exceptionally fine plants in that territory.

The next article in this series will discuss the large types, those ranging from ten to twenty-five feet in height.

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Reporting further on results of experiments dealing with the fertilization of shade trees in the nursery which have been under way since the autumn of 1931, "Nursery Notes" for April, issued by the department of horticulture of Ohio State University, presents five mimeographed pages of data, from which are drawn the following conclusions:

The season of application of fertilizer does not appear, in itself, to be so important a factor as previously indicated. Fall, spring and summer applications have given nearly equal results over the 8-year period of this test.

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Potash does not seem necessary in this particular soil type, although plots receiving some potash are somewhat benefited.

CATALOGUES RECEIVED.

Herbst Bros., New York, N.Y.—Wholesale price list, dated May, 1941, of seeds for nurserymen, 24 pages, 4x9 inches.

Tom Dodd Nurseries, Semmes, Ala.—Wholesale price list of nursery stock features azaleas, 16 pages and cover, 4x9 inches.

John C. Eskesen, Seattle, Wash.—Retail descriptive price list of chrysanthemums for the garden gives maturity dates, 12 pages and cover, 4x8½ inches.

LANDSCAPING of the coliseum at Fort Worth, Tex., where the third annual Star Telegram home show was held recently, was done by the Baker Bros. Nursery Co. Three large plots of flowering shrubs and vines were arranged in the center of the arena.

CERTIFICATE of incorporation of Brookfield Nurseries, Inc., Brookfield, Conn., was filed April 8 with the secretary of state, Hartford. The incorporators are Edward G. Duerstein and Mae Duerstein, of Hastings-on-Hudson, N.Y., and John S. Dixon, Brookfield, Conn.

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